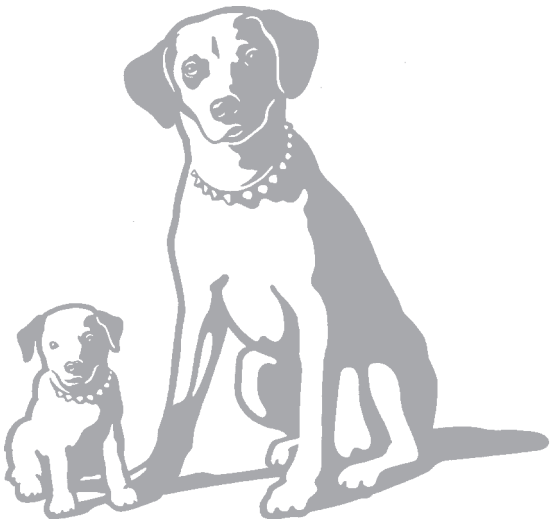
USER'S GUIDE

RCA



TV GUIDE Plus+™

COLOR TV

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IMPORTANT INFORMATION

WARNING

To reduce the risk of fire or shock hazard, do not expose this TV to rain or moisture.

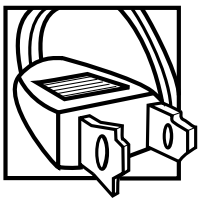
WARNING

RISK OF ELECTRIC SHOCK DO NOT OPEN

To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

This symbol indicates important instructions accompanying the product.



Caution: To reduce the risk of electric shock, match wide blade of plug to wide slot, fully insert.

Attention: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqú au fond.

Refer to the identification/rating label located on the back panel of your product for its proper operating voltage.

FCC Regulations state that unauthorized changes or modifications to this equipment may void the user's authority to operate it.

If fixed (non-moving) images are left on the screen for long periods, they may be permanently imprinted on the screen. Such images include network logos, phone numbers, and video games. This damage is not covered by your warranty. Extended viewing of channels displaying these images should be avoided.

Cable TV Installer: This reminder is provided to call your attention to Article 820-40 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

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TABLE OF CONTENTS

FIRST THINGS FIRST 3
- Connecting your TV 4
  - TV Only 4
  - TV with other Components 4
  - TV Guide Plus+ Controller 5

USING THE MENU SYSTEM 7
- The Menu Rule: Point and Select 8
  - What is Point and Select? 8
- Menus and Control Panels 10
  - Menus 10
  - Control Panels 11
  - Choice Lists 12
  - Numeric Entry 13
  - TV Guide Plus+ Menus 14

INTERACTIVE SETUP 15
- Entering Setup 16
- Select a Language 16
- Auto Channel Search 16
- TV GUIDE Plus+System 17
- Set the Time 23
- Set the VCR1 Channel 24
- Set the DVD/VCR2 Channel 25
- Set the SAT/CABLE Channel 26
- Label the Channels 27

PROGRAMMING THE REMOTE 29
- Programming the Remote 30
  - To Control a VCR 30
  - To Control a DVD Player or Laserdisc Player 32
  - To Control an RCA Audio Device: 32
  - To Control a Satellite Receiver or Cable Box 33
- Using the Remote to Control a Device 33

TOUR OF THE TV 35
- Remote Buttons 36
- Back Panel 38
- Front Panel 40
- Channel Marker 41

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TABLE OF CONTENTS

QUICK REFERENCE 43
- Audio Menu 44
- Picture Quality Menu 45
- Screen Menu 46
- Channel Menu 47
- Time Menu 49
- Parental Controls Menu 50
- TV GUIDE Plus+ Menu 51
- Setup Menu 52

ADVANCED FEATURES 53
- TV GUIDE Plus+ Operation 54
  - Surf Menu 54
  - Next Menu 55
  - Scan Menu 55
  - Sort Menu 56
  - One-Button Recording 57
- PIP (Picture-in-Picture) Operation 58
  - A Brief Explanation 58
- Choosing an Audio Processor 60
- Closed Captioning 61
  - To Display Closed Captioning 61
  - Closed Captioning Modes 62
- On-screen Program Details 63

APPENDIX A: TV CONNECTIONS 65

APPENDIX B: OTHER COMPONENTS 76

APPENDIX C: TROUBLESHOOTING 78

APPENDIX D: LIMITED WARRANTY 80

APPENDIX E: CARE AND CLEANING 81

ACCESSORIES 82

INDEX 85

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FIRST THINGS FIRST

HI, I'M ROGER.

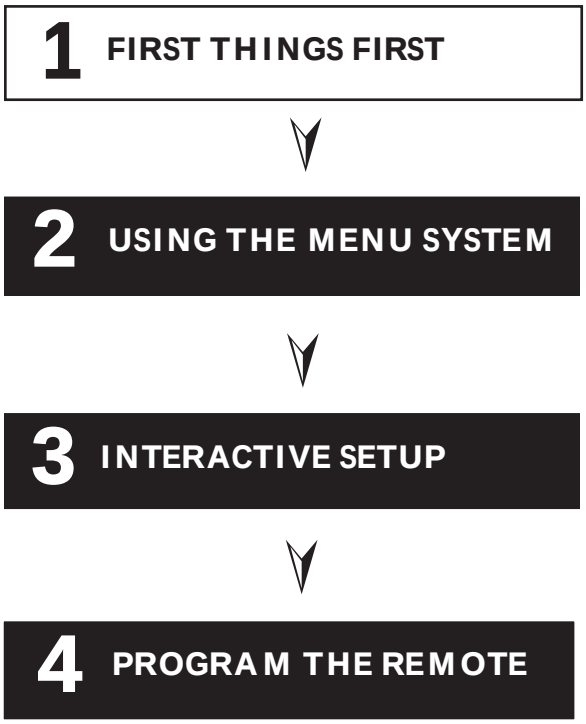
I wrote this manual to help you get the most from your TV. I know you expect a lot from your TV, so I designed this user manual to give you the information you need… when you need it.

READ THE FIRST FOUR CHAPTERS

The manual is designed to get you started quickly… and let you catch up on the details when you get a chance. The first four sections of the manual will get your TV up and running. You'll learn how to use the menu system, run the interactive setup routine and program the remote.

The rest of the manual gives you the specifics: a tour of the TV, a quick reference guide, details on the TV GUIDE Plus+ system, advanced features, and appendices.

Well… if your TV's out of the box, let's get started. First things first.



Check out the notes I've added throughout the manual. I've got some great tips that will help you get the most from your TV.

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FIRST THINGS FIRST

STEP 1

Unpack the TV. Make sure to locate the remote control and Connections Foldout.

Important Stand Information

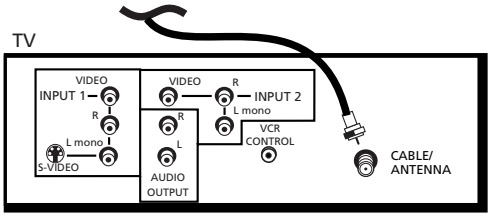
CAUTION: Choose the location for your TV carefully. Take precautions that the stand or other furniture the TV is placed on is properly located (see **Important Safeguards** sheet) and of adequate size and strength to prevent the TV from accidentally being tipped over, pushed off, or pulled off. This could cause damage to the TV and/or personal injury.

STEP 2: CONNECTING YOUR TV

If you're only going to connect the TV to your home antenna or cable system, use the "TV Only" connection shown below. If you're going to connect the TV to a VCR, satellite receiver, DVD player or other component, look at the Connections Foldout. The Connections Foldout details recommended connection schemes for hooking up the TV to a cable box or antenna, one or two VCRs, a laserdisc player, and a satellite receiver.

TV ONLY

This is a basic connection from an antenna or cable system to your TV. Connect the cable as shown. If you have a VCR or other components to connect to the TV, skip to the top of the next page.

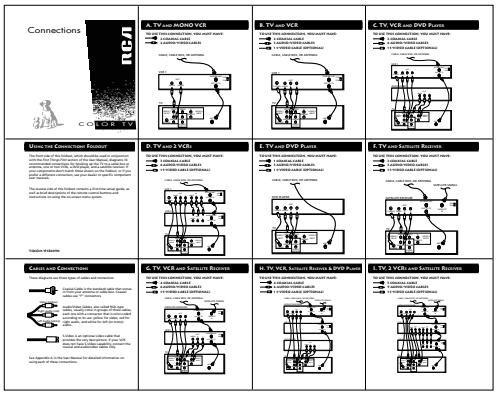


TV Only Connection

TV WITH OTHER COMPONENTS

Use the Connections Foldout to connect your TV to a VCR, DVD player, and/or satellite receiver. After connecting your TV and other components, proceed to the next step. See *Appendix A* for detailed information about using each of these connections.

If your components don't match those shown on the foldout, or if you prefer a different connection, see your dealer or specific component user manuals.



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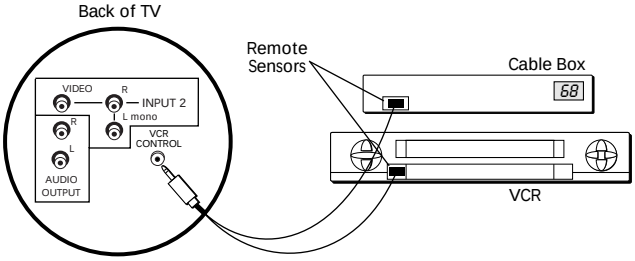
FIRST THINGS FIRST

TV GUIDE PLUS+ CONTROLLER

The TV GUIDE Plus+* controller allows direct control of a cable box and VCR using a pair of IR (infrared) controllers.

- Plug the TV GUIDE Plus+ controller into the VCR CONTROL jack on the back of the TV.
- Affix the IR controllers directly over the IR remote sensors on your cable box and VCR.

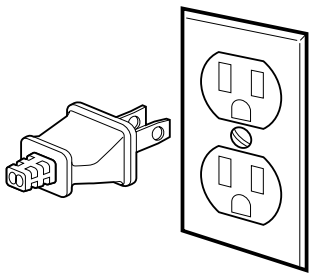


Connect IR controllers to the infrared remote sensors on your cable box and VCR

STEP 3

Plug in the TV.

Plug the end into the wall outlet, matching the wide blade of the plug with the wide slot in the outlet. Be sure to insert the plug completely.

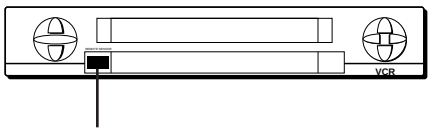


* GUIDE Plus+ is a trademark of Gemstar Development Corporation. TV GUIDE is a trademark of TV Guide Financial, Inc.

Locating the IR (infrared) Remote Control Sensor on Your Cable Box or VCR

The IR controllers must be affixed directly over the IR remote sensors on your cable box or VCR.

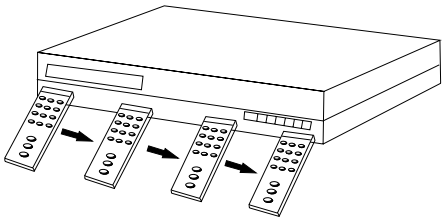
Some cable boxes and VCRs label the IR sensors; others do not. If the sensors are labeled, affix the IR controllers directly over them.



IR Remote Sensor

For those that do not label the IR sensor, you need to use the cable box or VCR's remote to locate the sensor before affixing the IR controllers.

1. **Hold the remote control so that it is touching the front of the cable box or VCR.**
2. **Slowly move the remote over the front of the cable box or VCR while pressing the remote's POWER button on and off**
3. **When the cable box or VCR turns off or on, you've located the sensor.**



You should test the IR controllers after setting up the TV GUIDE Plus+ system. Temporarily attach the IR controllers with clear tape to the spots where you think the sensors are located. After determining that the controllers are working correctly, affix them permanently.

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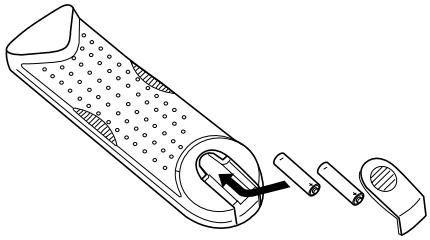
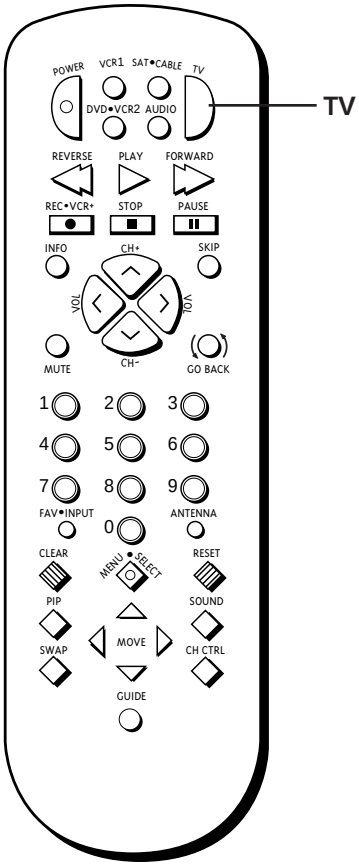
FIRST THINGS FIRST

STEP 4

Put batteries in the remote.

- Remove the battery compartment cover from the back of the remote.
- Insert batteries as shown, matching the + and – ends of each battery in the compartment.
- Replace the cover.





STEP 5

Turn on the TV.

Press TV on the remote, or press POWER on the TV itself.

STEP 6

Read the next section, *Using the Menu System*, which is a brief overview of the basic rules for getting around in the menus.

STEP 7

Proceed to section three, *Interactive Setup*. The interactive setup routine walks you through the steps needed to fully configure the TV. The first steps ask you to select your preferred language for the menu system and to begin the auto channel search, which puts available cable TV or antenna signals into the TV's memory. You can skip any of the steps and return to them later.

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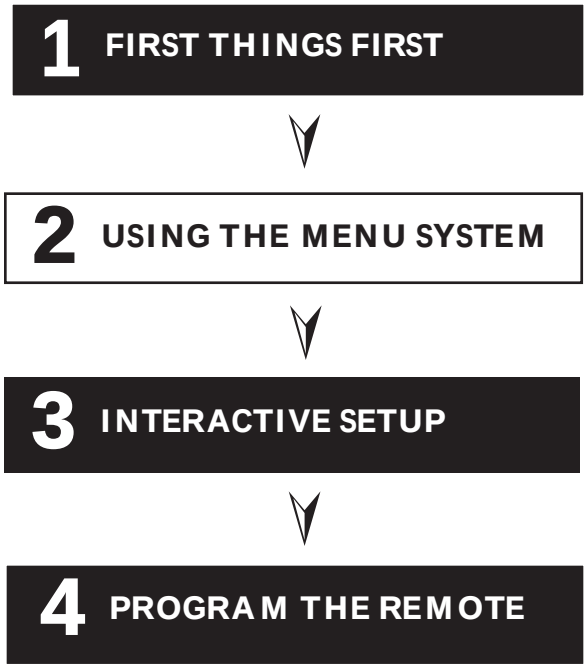
USING THE MENU SYSTEM

ONE RULE TO REMEMBER

You control and customize the TV by making changes to various control panels in the menu system. The great thing is, you only need to know one rule: point and select.



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USING THE MENU SYSTEM

THE MENU RULE: POINT AND SELECT

You only need to know one rule to use the on-screen menus and control panels: point and select.

WHAT IS POINT AND SELECT?

The point and select method has two steps.

1. **Point** to a menu item using the MOVE arrows on the remote.

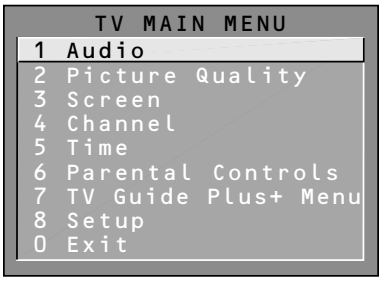
   To point up or down, press the up or down arrows. To point left or right, press the left or right arrows.

2. **Select** a menu item by pressing MENU•SELECT.

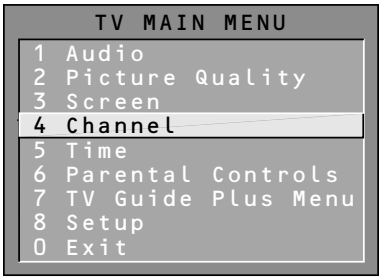
   Selecting an item tells the TV's menu system to go ahead and make the change or go to a place you have indicated.

For example, to select the Channel menu from the Main menu:

1. Press MENU to bring up the Main menu.



2. Point to *Channel* by pressing the down arrow until the word Channel is highlighted.



Tip: You can also select a menu item by entering the item number with the number buttons on the remote.

Press CLEAR at any time to remove all displays from the screen and return to TV viewing.

Many VCR user manuals refer to a PROGRAM button. The MENU•SELECT button on this remote works as a PROGRAM button in VCR mode. The rest of this manual refers to this button only as MENU.

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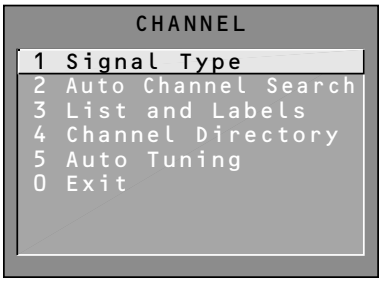
USING THE MENU SYSTEM

3. Press MENU to select *Channel*. The Channel menu comes up.



4. Point to *Exit* and press MENU to return to the Main menu.
5. Point to *Exit* and press MENU to leave the menu system and return to TV viewing.

   If you ever want to leave the menu system, press CLEAR.

Once you know how to point and select your way through the menus, you can apply this rule in the control panels, which do the real work in the menu system.

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USING THE MENU SYSTEM

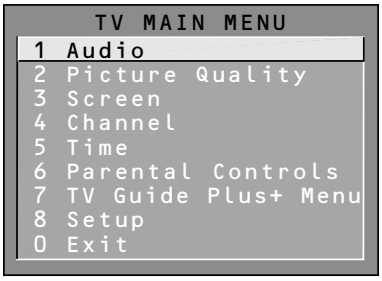
MENUS AND CONTROL PANELS

There are three parts to the menu system: menus, control panels, and the TV GUIDE Plus+ system. But before you can use control panels or the TV GUIDE Plus+ system, you first have to move through at least one menu—the Main menu.

MENUS

The first menu is called the Main menu. To bring up the Main menu:

1. Press MENU on the remote or front panel:



Menus take you to another menu or a control panel. There are two ways to make a choice in a menu:

- Point and select with the MOVE arrows and MENU.
- Press a number button on the remote. For example, in the Main menu press 3 to go straight to the Screen menu.

Exiting a menu

There are three ways to exit a menu:

- Point to *Exit* and press MENU.
- Press 0 on the remote.
- Press CLEAR. The on-screen displays are cleared from the screen and you are returned to TV viewing.

Feel free to explore the menu system. If you're ever unsure where you are in the menu system, or you're just plain tired of exploring, press CLEAR to remove the menus from the screen and start over again.

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USING THE MENU SYSTEM

CONTROL PANELS

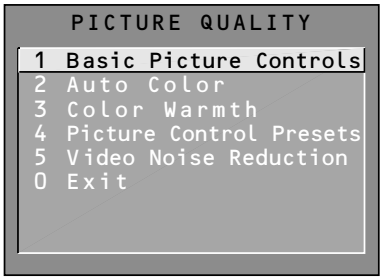
Control Panels do the work in the menu system: it's where you choose a setting, enter a number, or adjust a level such as tint or brightness. There are three kinds of control panels: sliders, choice lists, and numeric entry.

Sliders

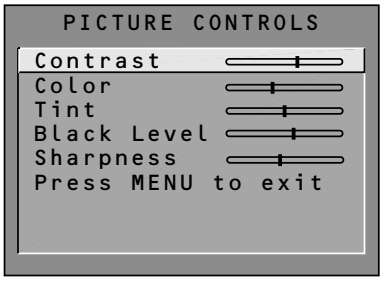
Sliders are used to make adjustments to a particular control.

For example, to adjust the TV's contrast:

1. Press MENU to bring up the Main menu.
2. Point to *Picture Quality* and press MENU. The Picture Quality menu comes up.
3. Press MENU to select Basic Picture Controls.



4. Press the right or left arrow to adjust the indicator line. Notice that the picture changes as you adjust the contrast.



Now that you know how the Contrast slider works, you know how all sliders work.

You don't need to remember the names of the control panel types. Once you've learned how each type works, you'll be able to use any part of the menu system.

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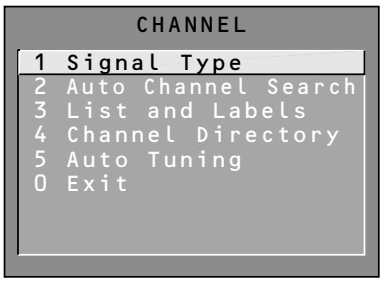
USING THE MENU SYSTEM

CHOICE LISTS

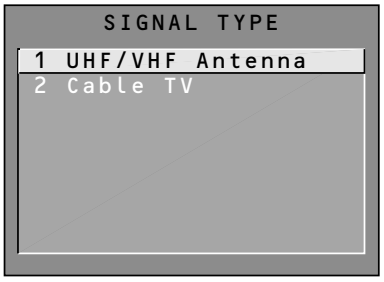
Choice lists are used to choose a particular setting from a list of settings. The current setting in a choice list is always the highlighted item.

For example, to indicate whether you're currently using a home antenna or a cable TV signals:

1. Press MENU to bring up the Main menu.
2. Point to *Channel* and press MENU. The Channel menu comes up.



3. Point to *Signal Type* and press MENU. The Signal Type choice list comes up with the current setting highlighted. For example:



4. Point to the correct setting for your connection and press MENU. As soon as you select a choice, the TV saves your change, and you are returned to the previous menu.
5. Point to *Exit* and press MENU to return to the Main menu.
6. Point to *Exit* and press MENU to return to TV viewing.

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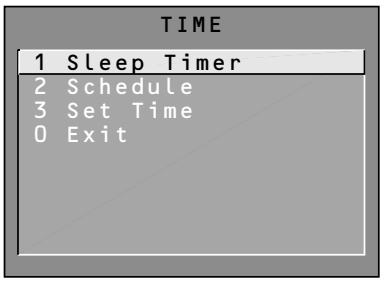
USING THE MENU SYSTEM

NUMERIC ENTRY

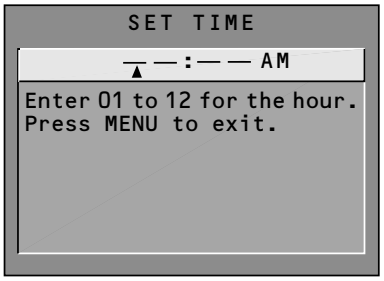
A numeric entry control panel is used to enter numbers or letters.

For example, to set the current time:

1. Press MENU to bring up the Main menu.
2. Point to *Time* and press MENU.



3. Point to *Set Time* and press MENU. The Set Time numeric entry control panel comes up. Notice the pointer underneath the first column.



4. Press the up arrow to enter a number in that column.
5. Press the right arrow to move to the next column, then press the up or down arrow to enter a number.
6. Repeat Step 5 until you have entered the hour and minute for the current time. Notice that when you reach the last column, pressing the up or down arrow changes whether the time reads AM or PM.
7. When you have entered the correct time, press MENU. You are returned to the Time menu.
8. Point to *Exit* and press MENU to return to the Main menu.
9. Point to *Exit* and press MENU to return to TV viewing.

If the control panel is not set at the current time, use the left arrow to go back over the columns and the up arrow to make changes.

You can also enter numbers directly by using the number buttons.

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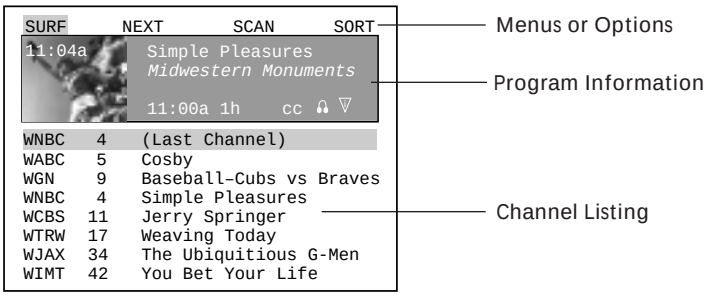
USING THE MENU SYSTEM

TV GUIDE PLUS+ MENUS

The TV GUIDE Plus+ system is an interactive on-screen program guide that lists TV schedules for your area, and allows your TV direct control of a cable box and VCR. Use of the system's menus differs slightly from the point and select method described earlier.

1. Press GUIDE to bring up the TV GUIDE Plus+ menu.



There are three sections to a TV GUIDE Plus+ menu:

- A row of menus or options across the top of the screen
- Program information
- Channel listing

Unlike your TV's other menus, TV GUIDE Plus+ menus use two methods of pointing and selecting on the same screen—one for menus or options, and one for program information.

To select menus or options:

- Press the right or left arrow to highlight your choice.
- Press MENU to select the highlighted item. *MENU is used only when selecting menus or options.*

To make selections in the program listing:

- Press the up or down arrow to select a channel.
- Press GUIDE or CLEAR to exit the TV GUIDE Plus+ system. The TV will change to the channel you selected if you used the GUIDE button. Pressing CLEAR returns to the original channel.

See Interactive Setup *and* Advanced Features *for more information on using the TV GUIDE Plus+ system.*

TV GUIDE Plus+ screens illustrated in this book are representations of what you are likely to see. Not all channels, programs, and TV GUIDE Plus+ information depicted will be available in your area.

Currently, program information can include title, brief description, time program starts, length, and the availability of closed captioning, stereo and additional program information.

New features and options can be downloaded to the TV GUIDE Plus+ system, so these too are subject to change.

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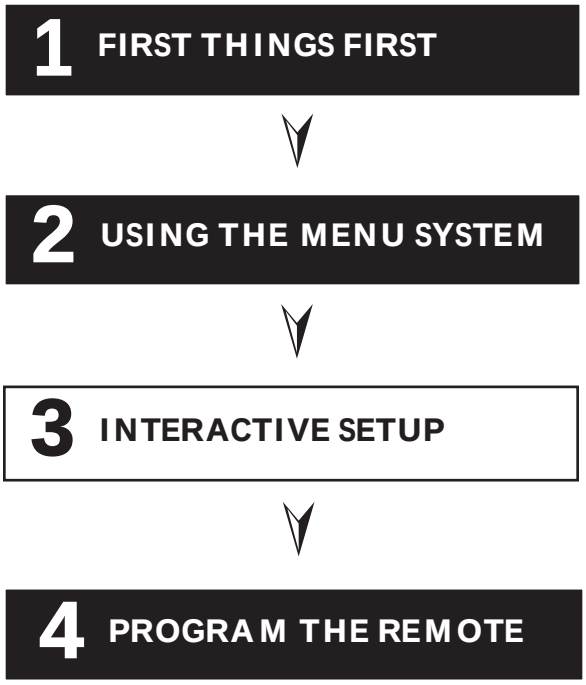
INTERACTIVE SETUP

THERE'S AN ON-SCREEN SETUP ROUTINE

Your TV has software that tells it what to do, just like a computer. The interactive setup routine takes you through the steps needed to configure the TV:

- Select a menu language
- Search for available channels
- Set up the TV GUIDE Plus+ system
- Set the time
- Set the VCR1 channel
- Set the DVD/VCR2 channel
- Set the SAT/CABLE channel
- Make the channel list and labels



Complete the first two steps, Select Language and Auto Channel Search, to receive antenna or cable TV signals. After that, you can skip other steps and return to them at your convenience.

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INTERACTIVE SETUP

ENTERING SETUP

Setup is accessed through the Main menu:

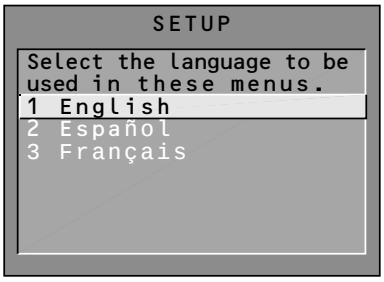
1. Press MENU to bring up the Main menu.
2. Point to *Setup* and press MENU. The first Setup screen comes up, asking you to confirm that you want to begin.

SETUP
When first used or after a power outage, your television needs to be set up.
Would you like to begin now?
1 Begin setup now
2 Cancel setup

3. Press MENU to begin the Setup routine.

SELECT A LANGUAGE

The first part of the setup routine asks you to select your preferred language for the menuing system.



1. Point to your preferred language for the menuing system.
2. Press MENU to select that language for the menuing system.

AUTO CHANNEL SEARCH

The next part of the setup routine asks you if you want the TV to search automatically for all channels available through your antenna or cable TV system. This is sometimes called "autoprogramming."

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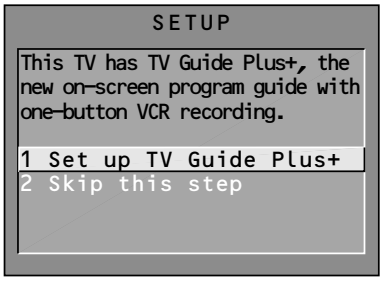
INTERACTIVE SETUP

1. Press MENU to tell the TV to begin searching for channels. The display gives you a progress report and tells you when it has finished.
2. Press MENU to continue.

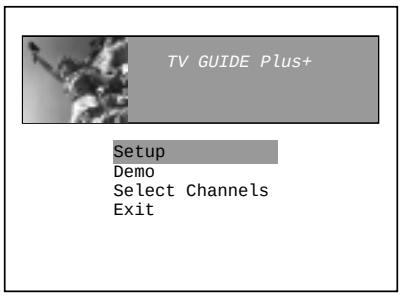
If you skip Auto Channel Search now, you can access it later through the Channel menu. You can also put channels in memory manually using List & Labels. See *Quick Reference* for more details.

TV GUIDE PLUS+SYSTEM

The next step lets you set up the TV GUIDE Plus+ system to display your local program listings, and control your cable box and VCR.


SETUP
This TV has TV Guide Plus+, the new on-screen program guide with one-button VCR recording.
1 Set up TV Guide Plus+
2 Skip this step

1. Press MENU to bring up the TV GUIDE Plus+ initial menu.



2. Press MENU to begin setup.

To complete TV Guide Plus+ setup, you must have already connected the TV Guide Plus+ controllers to your cable box and VCR. Refer to *First Things First* for more details.

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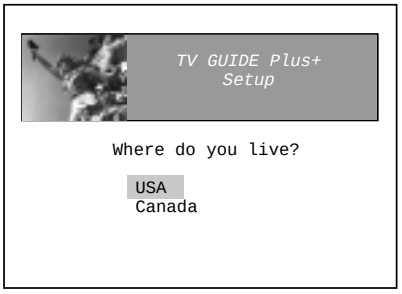
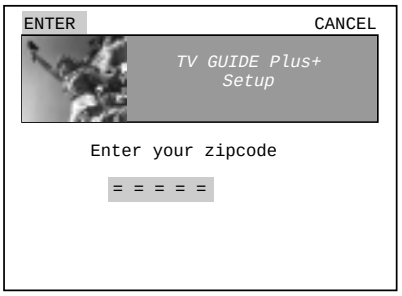
INTERACTIVE SETUP

The first two screens ask for information about where you live.

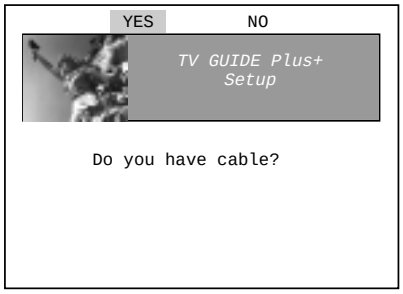


3. Select your country.



4. Enter your ZIP code (Postal Code in Canada) using the numeric keypad. If you make a mistake, press MENU to back up a number.

The next series of screens asks you about your cable TV setup. If you have a cable box, you will want to set the TV GUIDE Plus+ system to control it. Otherwise, it may not be able to locate and download program information.



5. Select *YES* if you have cable, or *NO* if you do not.

Since the program information provided by TV Guide Plus+ is based on your locale, you will need to run setup again if you move.

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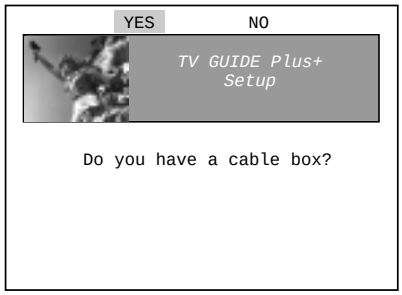
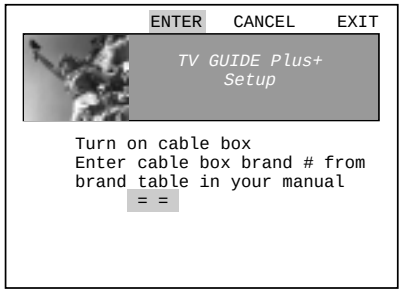
INTERACTIVE SETUP

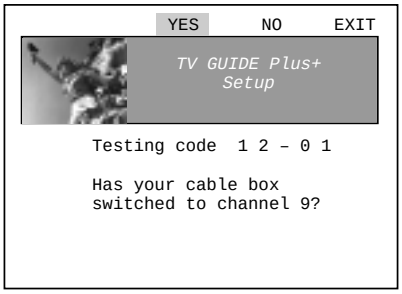


6. Select *YES* if you have a cable box, or *NO* if you do not.



7. Enter the code for your cable box's brand from the table on the following pages.

When the TV GUIDE Plus+ system correctly identifies the brand and model of your cable box, the cable box changes to channel 9.



8. Select *YES* if the cable box changed to channel 9, or *NO* if it did not. If you select *NO*, the system will try another code.

Once the correct model of cable box has been identified, you will need to set the cable box's output channel.

When TV Guide Plus+ cannot recognize either your cable box or VCR after several tries, a screen reading, "Cable Box (VCR) test failed… Please consult manual and try again" appears. If this happens, you should:

- **Double check the codes listed in the tables. Try entering another.**
- **Check to make sure the IR controllers are positioned correctly.**

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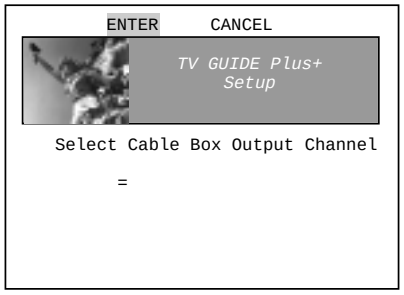
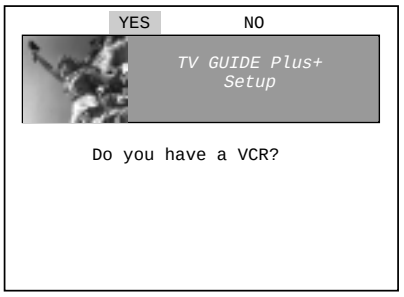
INTERACTIVE SETUP



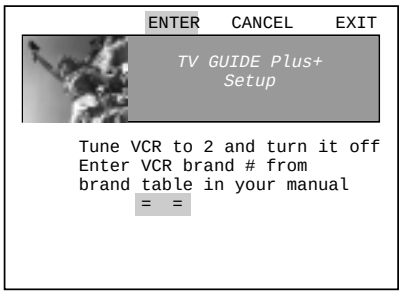
9. Enter the channel you normally use to view channels through your cable box—usually 3 or 4. Consult your cable box's instruction book or your cable company if you are not sure. Choose *0* to use VIDEO INPUT 1.

The last series of screens asks about your VCR setup.



10. Select *YES* if you have a VCR, or *NO* if you do not.

Answering *NO* automatically skips forward to the end of TV GUIDE Plus+ setup.



11. Tune your VCR to channel 2 and turn it off.
12. Enter the code for your VCR's brand from the table on the following pages.

Channels 0–7 can be used for the cable box's output channel. "0" is used for VIDEO INPUT 1 (INPUT 2 cannot be used); 1–7 are regular TV channels.

See *Advanced Features* for more details on using the TV GUIDE Plus+ system to control a cable box and VCR .

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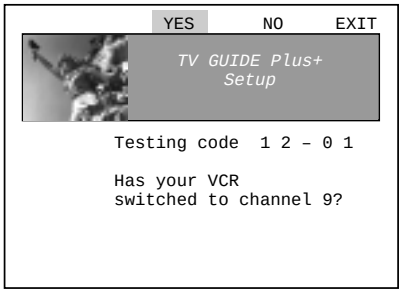
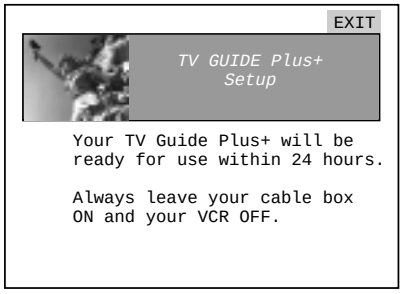
INTERACTIVE SETUP

When the TV GUIDE Plus+ system correctly identifies the brand and model of your VCR, the VCR's tuner changes to channel 9.



13. Select *YES* if the VCR automatically changed to channel 9, or *NO* if it did not. If you select *NO*, the system will try another code.

This screen comes up when you've successfully finished TV GUIDE Plus+ setup.



14. Select *EXIT* to continue with the remainder of the interactive setup.

The TV GUIDE Plus+ system will be unavailable until it completes its first download of program information.

When the power is turned off, the TV locates a "host channel" that carries TV GUIDE Plus+ data containing program schedule and channel mapping information. A channel map is the list of stations and their respective channels. See *Advanced Features* for more details.

Downloads may be scheduled several times a day. *The TV must be turned off for TV GUIDE Plus+ data to download.*

If more than one cable company services your area, the TV GUIDE Plus+ system may download a channel map for each company.

After the TV completes its first download, you will be prompted to manually select the channel map.

See *Advanced Features* for complete instructions.

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INTERACTIVE SETUP

TV GUIDE Plus+ VCR Codes

Admiral	19	MTC	14
Akai	15	Multitech	14
Audio Dynamics	11	NEC	11
Belcor	16	Nikko	16,22
Bell&Howell	04	Olympus	03
Broksonic	26	Optimus	27
Candle	27	Optonica	19
Canon	03	Orion	24
Capehart	16	Panasonic	03
Craig	17	Pentax	21
Curtis	23	Philco	28
Daewoo	16	Philips	28
DBX	11	Pilot	22
Electrohome	08	Pioneer	21
Electron	01	ProScan	01
Emerson	05	Quasar	03
Fisher	04	Radio Shack/Realistic	30
Funai	14	Randix	22
GE	01	RCA	01
Go Video	02	Samsung	23
Goldstar	22	Sansui	20
Grundig	03	Sanyo	04
Harman Kardon	08	Scott	05
Hitachi	21	Sears	06
Images	02	Sharp	19
JC Penney	25	Shintom	17
Jenson	31	Shogun	23
JVC	12	Signature	19
Kenwood	12	Sony	13
KLH	17	Sylvania	28
Magnavox	07	Symphonic	14
Magnin	23	Tatung	31
Marantz	11	Teac	31
Marta	22	Teknika	18
Memorex	29	Telefunken	05
MGA	08	TMK	05
Minolta	21	Toshiba	10
Mitsubishi	08	Totevision	23
Montgomery Ward	14	Vector Research	11
Movie Walker	14	Zenith	09

The TV GUIDE Plus+ system may not operate all models of the brands listed in the tables on this page.

TV GUIDE Plus+ Cable Box Codes

Archer	14
Cable Cinema	31
Cabletenna	31
Cableview	31
Century	27
Citizen	29
Curtis	04
Diamond	31
Eagle	09
Eastern	13
GC Electronics	26
Gemini	15
General Electric	19
General Instrument	01
Gerrard	27
Hamlin	06,13
Hitachi	16
Jasco	15
Jerrold	01
Macom	16
Magnavox	11
Matsushita	07
Movietime	17
NEC	22
Novavision	04
NSC	22
Oak	05
Oak Sigma	05
Panasonic	07
Philips	10
Pioneer	02
Pulser	24
Quest	02
RCA	07
Realistic	27
Recoton	27
Regal	06
Regency	13
Rembrant	26
L.L. Marx	23
Samsung	23
Scientific Atlanta	04
Sheritech	12
Signal	11
Sprucer	07
Standard Components	17
Stargate	24
Sylvania	08
Teknika	20
Telecaption	21
Teleview	22
Texscan	08
Tocom	18
Toshiba	30
Unika	26
Universal	25
Videoway	03
Vidtek	28
Viewstar	09
Zenith	03

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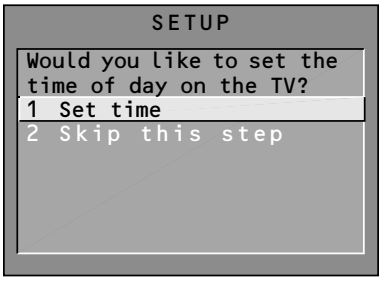
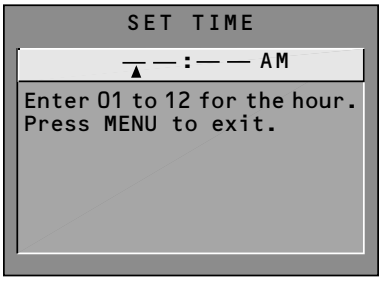
INTERACTIVE SETUP

SET THE TIME

The next step lets you set the time of day.



1. Press MENU to bring up the Set Time control panel.



2. Use the left and right arrows to point to the hour and minutes spaces. Use the up and down arrows to scroll through the numbers and change from AM to PM.
3. Press MENU to continue.

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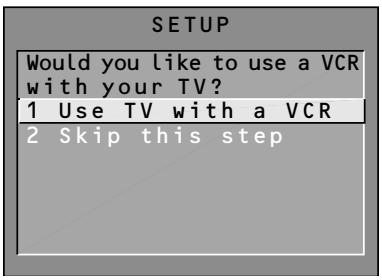
INTERACTIVE SETUP

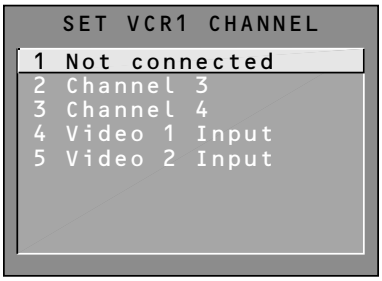
SET THE VCR1 CHANNEL

The next step lets you set the VCR1 channel. When you set the VCR1 channel, you're telling the TV what channel to tune to when you press the VCR1 button on the remote.

For example, if you have a VCR connected to the Video 1 input jacks on the back of the TV, you want the TV to tune to the Video 1 input channel when you press the VCR1 button. If you don't have a VCR1 component connected to the TV, skip this step or select *Not Connected* from the VCR1 Channel choice list. (For more, see *Auto Tuning* in the Quick Reference section.)



1. Press MENU to bring up the VCR1 choice list.



2. Point to the choice that matches the way you have your VCR connected to the TV.

   If you used the Connections Foldout to hook up your TV, use the table shown at the right to select the VCR1 channel.

3. Press MENU to continue.

If you used	Select
Connection A	Video 1 Input
Connection B	Video 1 Input
Connection C	Video 1 Input
Connection D	Video 1 Input
Connection E	Not Connected
Connection F	Not Connected
Connection G	Video 2 Input
Connection H	Channel 3*
Connection I	Video 2 Input

*** Or Channel 4 , depending on how your VCR's 3/4 switch is set.**

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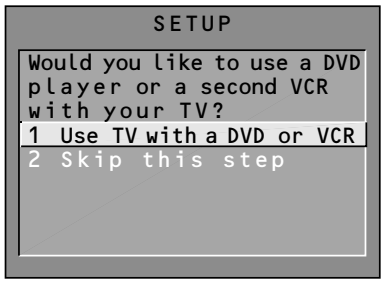
INTERACTIVE SETUP

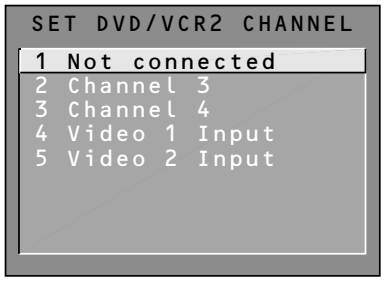
SET THE DVD/VCR2 CHANNEL

The next step lets you set the DVD/VCR2 channel. When you set the DVD/VCR2 channel, you're telling the TV what channel to tune to when you press the DVD•VCR2 button on the remote.

For example, if you have a DVD player connected to the Video 2 input jacks on the back of the TV, you want the TV to tune to the Video 2 input channel when you press DVD•VCR2. If you don't have a DVD•VCR2 component connected to the TV, skip this step or select *Not Connected* from the DVD/VCR2 Channel choice list. (For more, see *Auto Tuning* in the Quick Reference section.)



1. Press MENU to bring up the DVD/VCR2 choice list.



2. Point to the choice that matches the way you have your DVD player or second VCR connected to the TV.

   If you used the Connections Foldout to hook up your TV, use the table at right to select the DVD/VCR2 channel.

3. Press MENU to continue.

If you used	Select
Connection A	Not Connected
Connection B	Not Connected
Connection C	Video 2 Input
Connection D	Channel 3*
Connection E	Video 1 Input
Connection F	Not Connected
Connection G	Not Connected
Connection H	Video 2 Input
Connection I	Channel 3*

*** Or Channel 4, depending on how your VCR's 3/4 switch is set.**

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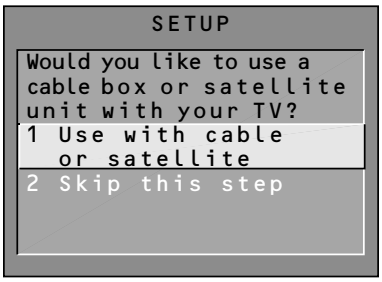
INTERACTIVE SETUP

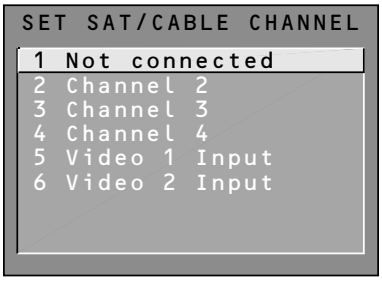
SET THE SAT/CABLE CHANNEL

The next step lets you set the SAT/CABLE channel. When you set the SAT/CABLE channel, you're telling the TV what channel to tune to when you press the SAT•CABLE button on the remote.

For example, if you have a cable box connected to the Antenna jack on the back of the TV, and you usually tune your TV to channel 3 to see cable stations, you want the TV to tune to channel 3 when you press SAT•CABLE. If you don't have a satellite receiver or cable box connected to the TV, skip this step or select *Not Connected* from the SAT/CABLE Channel choice list. (For more, see *Auto Tuning* in the Quick Reference section.)



1. Press MENU to bring up the SAT/CABLE choice list.



2. Point to the choice that matches the way you have your satellite receiver or cable box connected to the TV.

   If you used the Connections Foldout to hook up your TV, use the table at the right to select the SAT/CABLE channel.

3. Press MENU to complete the Setup routine and return to TV viewing.

Important:

If you have both a satellite receiver and a cable box connected to the TV...

...The remote cannot control both a cable box and the satellite receiver. The chart details how to set the SAT•CABLE button to control the satellite receiver. You must then use your cable box remote to control the cable box. You may, however, prefer to use the satellite receiver remote for satellite programming, and set your SAT•CABLE button to control your cable box. It's your choice.

If you used	With Cable Box Select
Connection A	Channel 3*
Connection B	Channel 3*
Connection C	Channel 3*
Connection D	Channel 3*
Connection E	Channel 3*
If you used	**With Satellite Receiver Select**
Connection F	Video 1 Input
Connection G	Video 1 Input
Connection H	Video 1 Input
Connection I	Video 1 Input

*** Or Channel 4, depending on how your VCR's 3/4 switch is set.**

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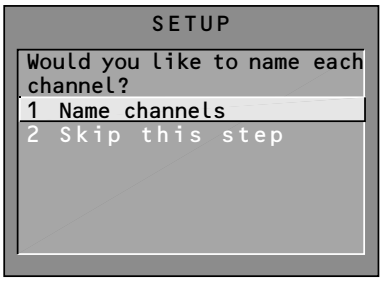
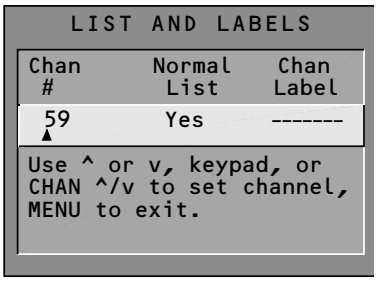
INTERACTIVE SETUP

LABEL THE CHANNELS

The next step lets you make your channel list and label your channels. (For more, see *List and Labels* in the Quick Reference section.)



1. Press MENU to bring up the List and Labels control panel.



2. Use the left and right arrows to point to the three different areas of the control panel (called "fields").
3. Use the up and down arrows to scroll through the numbers and letters and select *Yes* or *No* in the Normal List field. You may wish to refer to the call letters listed in your newspaper's TV section for ideas on labelling the channels.
4. Repeat this process for each of your channels. Then press MENU to continue. The TV can store up to 27 labels in memory.

Use the CH ^ (channel up) or CH v (channel down) buttons to change channels in the Chan # field. This works even if you're not in the Chan # field. Or, enter the channel number directly using the number buttons on the universal remote. To enter a number greater than 99, press and hold "1" to enter the hundreds digit, then press the two remaining numbers.

The list and labels feature can also be accessed from the Channel menu. Because this procedure can be time consuming, feel free to skip this step and come back to it later.

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INTERACTIVE SETUP

What Now?

Now that you've finished the interactive setup, you can sit back, relax, and enjoy the TV. Or...

Program the Remote

Since you've gone this far, you can take a few minutes to program the remote to control your VCR, DVD player, laserdisc player, and other component. To find out how to program the remote, go to the next section.

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PROGRAMMING THE REMOTE

IF YOU HAVE A VCR OR OTHER COMPONENT...

The universal remote can be programmed to control most brands of remote controllable VCRs, satellite receivers, DVD players and cable boxes. If you have an RCA, GE, or ProScan component, you probably don't need to program it at all—other manufacturers' brands need to be programmed.

NOW WATCH SOME TV!

Once you've programmed the remote, you will have completed all four setup sections. Now you can sit back and enjoy the TV. If you want to know more about the different parts of the TV, see the next section, *Tour of the TV*. Refer to the other sections and appendices as needed.

1 FIRST THINGS FIRST

2 USING THE MENU SYSTEM

3 INTERACTIVE SETUP

4 PROGRAMMING THE REMOTE

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PROGRAMMING THE REMOTE

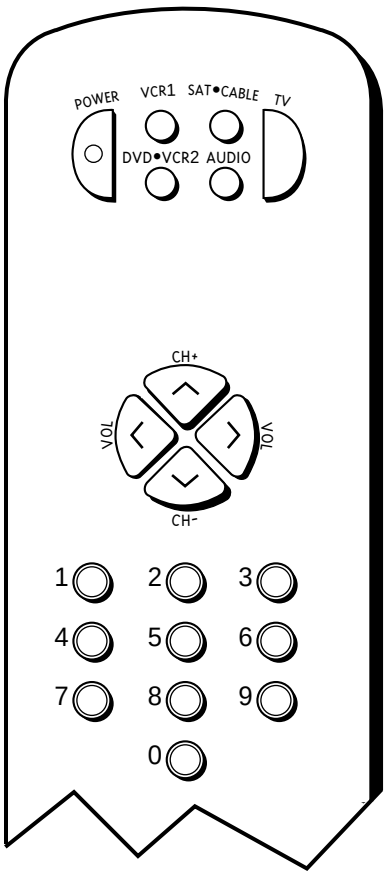
The universal remote can be programmed to control most brands of remote controllable VCRs and cable boxes. The remote is already programmed to control most RCA, GE and ProScan TVs VCRs, DVD players, laserdisc players and satellite receivers. Other manufacturers' brands need to be programmed.

PROGRAMMING THE REMOTE TO CONTROL A VCR

To determine whether the universal remote needs to be programmed, turn the VCR on, point the remote at the VCR, and press the VCR1 button. Then press POWER or CH ^ (channel up) or CH v (channel down) to see if the VCR responds to the remote commands. If not, the remote needs to be programmed.

Follow these steps to program your universal remote to control your VCR:

1. Turn on the VCR to be programmed.
2. Look up your VCR brand and code number(s) on the code list on the next page.
3. Press and hold the VCR1 button on the remote.
4. Enter the two-digit code from the code list.
5. Release VCR1 then press POWER to see if the VCR responds to the remote commands. If it doesn't, try pressing VCR1 and POWER to see if the VCR responds.
6. Repeat these steps using the next code listed for your brand, until the VCR responds to the remote commands.



You'll use these buttons when you program the remote to control any devices.

This remote may not operate all models of the brands that are shown. Use the codes shown at right or on the sheet packed in with your remote.

To program the DVD•VCR2 button to control a second VCR, follow these steps but use the DVD•VCR2 button instead of the VCR1 button.

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PROGRAMMING THE REMOTE

Universal Remote VCR Codes

Admiral 06,79
Aiwa 15
Akai 03,17,22,23,63,66
Audio Dynamics 14,16
Bell&Howell 02
Broksonic 10
Candle 07,09,13,44,
..... 45,46,52
Cannon 08,53
Capehart 01
Citizen 07,09,13,44,
..... 45,46,52
Colortyme 14
Craig 07,12
Curtis-Mathes 00,07,08,14,
..... 15,44,46,53,64,67
Daewoo 13,45,52,76
DBX 14,16
Dimensia 00
Dynatech 15
Electrohome 27
Emerson 08,09,10,13,15,20,23,
..... 27,34,41,42,47,49,
..... 57,62,65,67,68,70
Fisher 02,12,18,19,43,48,58
Funai 15
GE 00,07,08,32,37,53
Goldstar 09,14,46,60
Harman Kardon 14
Hitachi 05,15,35,36
Instant Replay 08
JCL 08
JC Penney 02,05,07,08,14,
..... 16,30,35,51,53
JVC 02,14,16,30,46,74
Kenwood 02,14,16,30,44,46
KLH 73
Lloyd 15
Logik 31
Magnavox 08,29,53,56
Marantz 02,08,14,16,29,
..... 30,44,46,61
Marta 09
MEI 08
Memorex 08,09,12,15
MGA 04,27
Midland 32
Minolta 05,35
Mitsubishi 04,05,27,35,40
Montgomery Ward 06
MTC 07,15
Multitech 07,15,31,32
NEC 02,14,16,30,44,46,59,61,64
Panasonic 08,53,75,77
Pentax 05,35,44
Pentex Research + ... 46
Philco 08,29,53,56
Philips 08,29
Pioneer 05,16,50
Portland 44,45,52
ProScan 00
Quartz 02
Quasar 08,53
Radio Shack/Realistic 02,06,08,
..... 09,12,15,19,27,43,53
RCA 00,05,07,08,28,35,37,54,69
Samsung 07,13,22,32,42
Sansui 16,71
Sanyo 02,12
Scott 04,13,41,49,68
Sears ... 02,05,09,12,18,19,35,43,48
Sharp 06,24,27,39,45
Shintom 17,26,31,55
Signature 15
Sony 17,26,38
Sylvania 08,15,29,53,56
Symphonic 15
Tandy 02,15
Tashiko 09
Tatung 30
Teac 15,30,69
Technics 08
Teknika 08,09,15,21
Toshiba 05,13,19,48,49
Totevision 07,09
TMK 67
Unitech 07
Vector Research 14,16,44
Victor 16
Video Concepts 14,16,44
Videosonic 07
Wards 05,06,07,08,09,
..... 12,13,15,25,27,31,35
Yamaha 02,14,16,30,46
Zenith 11,17,26,72,79

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PROGRAMMING THE REMOTE

PROGRAMMING THE REMOTE TO CONTROL A DVD PLAYER OR LASERDISC PLAYER

The remote's DVD•VCR2 button is preprogrammed to control the primary functions of an RCA, GE, or ProScan DVD player. If you would like this button to control a device other than a DVD player, you may program the remote to control a laserdisc player or VCR. To program the DVD•VCR2 button to control a device, use the DVD player or laserdisc player codes at the right or the VCR codes on the previous page.

1. Turn on the DVD player, laserdisc player or VCR.
2. Look up your brand and its code number(s) on the code lists.
3. Press and hold the DVD•VCR2 button on the remote.
4. Enter the two-digit code from the code list.
5. Release the DVD•VCR2 button and press POWER or another button to see if the device responds to the remote commands.
6. Repeat these steps using the next code listed for your brand, until the device responds to the remote commands.

DVD Player Codes

GE 78
ProScan 78
RCA 78

Laserdisc Player Codes

Pioneer 33,37
ProScan 33,37
RCA 33,37

PROGRAMMING THE REMOTE TO CONTROL AN RCA AUDIO DEVICE:

Your remote controls only RCA audio equipment such as an audio receiver or amplifier—it does not control other brands of audio equipment. Also, the remote may need to be programmed for your equipment. This remote may not operate all models of the brands that are shown at right. Use the codes below or on the sheet packed in with your remote.

1. Turn on the component to be programmed.
2. Look up your brand and its code number(s) on the code list.
3. Press and hold the AUDIO button.
4. Enter the two-digit code from the code list.
5. Release the AUDIO button and press POWER or CH ^ (channel up) or CH v (channel down) to see if the audio device responds to the remote commands.
6. Repeat these steps using the next code listed for your brand until the audio device responds to the remote commands.

Audio Codes

RCA/Dimensia

AM/FM 03
CD 07
Tape 06
Phono 05
Aux 04

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PROGRAMMING THE REMOTE

PROGRAMMING THE REMOTE TO CONTROL A SATELLITE RECEIVER OR CABLE BOX

Refer to the Connection Foldout or contact your cable company to hook up your cable box. If you have a cable box with its own remote, then you may also be able to use the TV's remote with your cable box. This remote may not operate all models of the brands that are shown. Use the codes at the right, or on the sheet packed with your remote.

1. Turn on the cable box or satellite receiver.
2. Look up your brand and its code number(s) on the code list.
3. Press and hold the SAT•CABLE button on the remote.
4. Enter the two-digit code from the code list.
5. Release the SAT•CABLE button and press POWER or CH ^ (channel up) or CH v (channel down) to see if the cable box responds to the remote commands.
6. Repeat these steps using the next code listed for your brand until the cable box or satellite receiver responds to the remote commands.

USING THE REMOTE TO CONTROL A DEVICE

Once the remote has been programmed with the correct codes, you are ready to use it to control your devices.

To operate the device:

1. Press the device button (TV, VCR1, SAT•CABLE, DVD•VCR2, or AUDIO) to set the remote to control the device.
2. Press POWER to turn the device off or on.
3. Use the remote buttons that apply to that device.

Satellite / Cable Box Codes

ABC 22,46,53,54
Anvision 07,08
Cablestar 07,08
Chaparral 80,81
Cheyenne 81
Diamond 56
Drake 82,83
Eagle 07,08
Eastern Int. 02
General Instruments ... 46,92,93,94
GI 400 04,05,15,23,24,25,30,36
Hamlin 03,12,13,34,48
Hitachi 37,43,46
Jerrold 04,05,15,23,24,25,30,
..... 36,45,46,47,62,65
Macom 37,43
Magnavox 07,08,19,21,26,28,
..... 29,32,33,40,41
NSC 09
Oak 01,16,38
Oak Sigma 16
Panasonic 03,27,39,61
Philips 07,08,19,21,26,28,
..... 29,32,33,40,41
Pioneer 18,20,44
Randtek 07,08
RCA 00,27,66
Realistic 84
Regal 03,12,13
Regency 02,33
Samsung 44
Sierra I,II,III 81
Sci. Atlanta 03,22,35,63,64
Signature 46
Sony DBS 95
Sprucer 27
Starcom 46
Stargate 2000 58
STS1,2,3,4 85,86,87,88
Sylvania 11,59
Teknika 06
Texscan 10,11,59
Tocom 17,21,49,50,55
Toshiba 89
Uniden 90
Unika 31,32,41
Universal 51,52,60
Video Cipher II 91
Viewstar 07,08,19,21,26,28,
..... 29,32,33,40,41
Warner Amex 44
Zenith 14,42,57,61

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TOUR OF THE TV

A PICTURE BOOK TOUR

This section talks about the TV's main parts (at least the parts you'll actually use):

- The remote control
- The back panel
- The front panel
- The channel marker

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TOUR OF THE TV

REMOTE BUTTONS

POWER When in TV mode, turns off the TV. In VCR mode, and if programmed, turns on and off most VCRs.

VCR1 If programmed, turns on VCR and puts the remote in VCR mode. Also turns on the TV.

SAT•CABLE If programmed, turns on satellite receiver or cable box. Puts the remote in SAT•CABLE mode. Also turns on the TV.

DVD•VCR2 If programmed, turns on DVD player or second VCR or laserdisc player. Puts the remote in DVD•VCR2 mode. Also turns on the TV.

AUDIO If programmed, turns on RCA audio component and puts the remote in audio mode.

TV Turns on the TV and puts the remote in TV mode. Also displays channel information.

REVERSE, PLAY, FORWARD, REC•VCR+, STOP, PAUSE If programmed, provides transport control for some remote-controllable VCRs, DVD players, laserdisc players, tape decks, and CD players. Pressing REC•VCR+ when using the TV GUIDE+ system sets the VCR to record a program.

VOL – or VOL + Decreases or increases the TV's volume.

CH ^ or CH v Scans up or down through the current channel list. Press once to change the channel up or down; press and hold to continue changing channels.

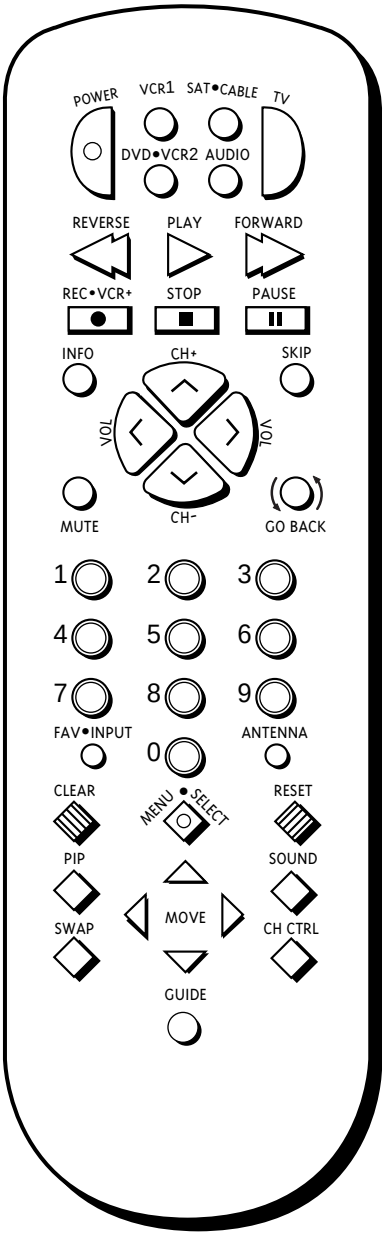
INFO Brings up channel information. Press repeatedly to see detailed program information, if available.

SKIP Press once before changing channels and the TV will wait 30 seconds before returning you to the original channel. Press repeatedly to add more time.

MUTE Reduces the TV's volume to its minimum level. Press again to restore the volume.

GO BACK Returns you to the previous channel.

(0-9) Number Buttons Enters channel numbers and time settings directly though the remote control. To enter a two-digit channel, press the two digits. To enter a three-digit channel, press and hold the first digit, then add the second two. Example: to tune to channel 123, press and hold 1, press 2, then press 3.



For more details, see the previous section, *Programming the Remote*.

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TOUR OF THE TV

FAV•INPUT In TV mode, press to toggle through the available input sources (VID1, VID2, previous channel). In SAT mode, press to select available channel lists.

ANTENNA Functions as TV/VCR button in VCR mode and TV/ receiver button in SAT•CABLE mode.

CLEAR Removes any menu or display from the screen and returns you to TV viewing.

MENU•SELECT Brings up the Main menu. When in the menu system, selects highlighted items or returns you to the previous menu. When in VCR mode, it functions as a PROGRAM button.

RESET Resets picture quality controls to the *Bright Lighting* Picture Control Preset. Point and select to choose a different Picture Control Preset.

MOVE (Arrows) Used to point to different items in the menu system. Also used to adjust the menu controls. Also move the PIP window when no menus are on the screen.

PIP Brings up the small picture-in-picture window. Press again to remove the PIP window.

SOUND Press once to display the audio processor control panel. Point and select to choose a different processor or press CLEAR to exit.

SWAP Swaps the main picture with the PIP window.

CH CTRL Selects the picture window, (that is, the main or PIP window) that is changed by the CH ^ (channel up) or CH v (channel down) buttons.

GUIDE Brings up TV GUIDE Plus+ menus. In SAT•CABLE mode brings up available on-screen guides.

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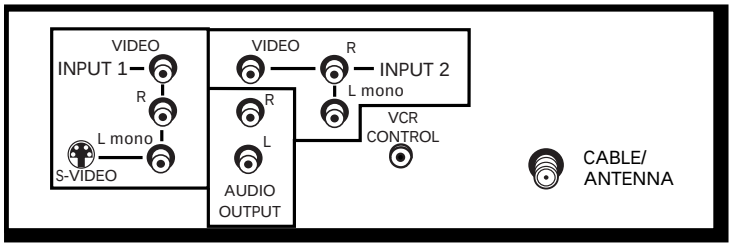
TOUR OF THE TV

BACK PANEL



INPUT 1 Lets you connect a video component such as a VCR, satellite receiver, DVD player or laserdisc player.

L/MONO Provides left audio connection. Or, if you are connecting a mono component, use the L/MONO input. The left audio connector is usually white.

RIGHT Provides right audio connection. The right audio connector is usually red.

VIDEO Provides video connection. The video connector is usually yellow.

S-VIDEO Lets you connect a component with S-Video capability, such as an S-video satellite receiver, DVD player or VCR. When using S-Video, make sure to connect the three audio/video cables as well as the S-Video connector.

INPUT 2 Provides a connection for a second video component such as a VCR, satellite receiver, DVD player or laserdisc player.

L/MONO Provides left audio connection. Or, if you are connecting a mono component, use the L/MONO input. The left audio connector is usually white.

RIGHT Provides right audio connection. The right audio connector is usually red.

VIDEO Provides video connection. The video connector is usually yellow.

ANT (Antenna) Provides connection to a home antenna or cable TV system.

If you are connecting a component to the VIDEO 1 INPUT and you are using S-Video, remember to connect the regular VIDEO 1 INPUT video cable as well.

Hooking up components isn't hard, but double-checking the cable and jack connections may help you avoid problems.

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TOUR OF THE TV

AUDIO OUTPUT Provides variable-controlled or fixed-level stereo audio output.

Variable output is ideal when connecting the TV to an amplifier that does not have its own volume control or remote control.

Fixed output is ideal when connecting to an A/V receiver or amplifier that has its own remote control.

You can choose the type of audio output by selecting the Audio Output & Speakers control panel in the Audio menu.

VCR CONTROL Lets you connect the TV GUIDE Plus+ controller, which allows direct control of your cable box and VCR.

To connect an amplified subwoofer to the TV, use the left (L) AUDIO OUTPUT jack.

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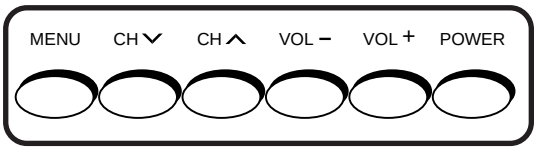
TOUR OF THE TV

FRONT PANEL



MENU Brings up the Main menu. When in the menu system, it selects highlighted items. Also returns you to the previous menu.

CH v Scans down through the current channel list. In the menu system, it points down to items and adjusts menu controls.

CH ^ Scans up through the channel list. In the menu system, it points up to items and adjusts menu controls.

VOL – Decreases the volume. When in the menu system, VOL – is used to point left to items and adjust menu controls.

VOL + Increases the volume. When in the menu system, VOL + is used to point right to items and adjust menu controls.

POWER Turns the TV on and off.

The front panel above shows a typical button layout. The exact look of the buttons may be different from those on the front of your TV.

If you turn Parental Control on, or lockout the front panel, the front panel no longer provides access to the menus. For more information, see *Parental Control*, in the Quick Reference section.

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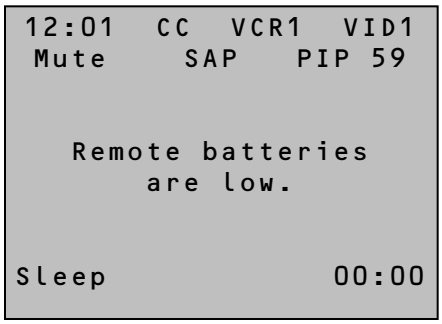
CHANNEL MARKER

There are several indicators that come up when you change channels, press the INFO button, or press the TV button. This display is called the Channel Marker.



12:01 Displays the current time.

CC Displayed when Closed Captioning is available on the current channel.

VCR1 Displays the label assigned to the current channel.

VID1 Displays the current channel or input channel.

Mute (or Stereo) Mute is displayed when you mute the audio. Stereo is displayed when the current channel is broadcasting in Stereo.

SAP Displayed when the current channel is broadcasting SAP (Second Audio Program) information.

PIP 59 (PIP Chan) Displays the current PIP channel.

Remote batteries are low Displayed when the batteries in the remote need to be replaced.

Sleep Displayed when the Sleep Timer has been set.

00:00 Displayed to count down time left on the commercial skip (SKIP) timer.

The channel marker shown above is just an example, of course.

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QUICK REFERENCE

A SHORT GUIDE TO THE MENU SYSTEM

This section provides a brief explanation of all the menu commands. These commands are organized in the chapter by their location in the Main menu.

- **Audio** Contains the controls that let you adjust the way the TV sounds.
- **Picture Quality** Contains the controls that let you adjust the picture.
- **Screen** Contains the controls that let you adjust the closed-caption mode and display.
- **Channel** Contains all the commands used to control your channels, including custom-building your channel list and setting up your TV to control the components connected to the TV.
- **Time** Contains the controls that let you set the time and schedule the TV to turn off and on at specific times.
- **Parental Controls** Contains the controls that let you block out specific channels and locks the TV's front panel controls.
- **TV GUIDE Plus+ Menu** Contains the controls that let you set up the TV GUIDE Plus+ system, run a demonstration, or turn the Label & Title display on and off.
- **Setup** Begins an interactive setup routine that lets you adjust your TV's menu system, channel list and how your TV receives signals from other components.

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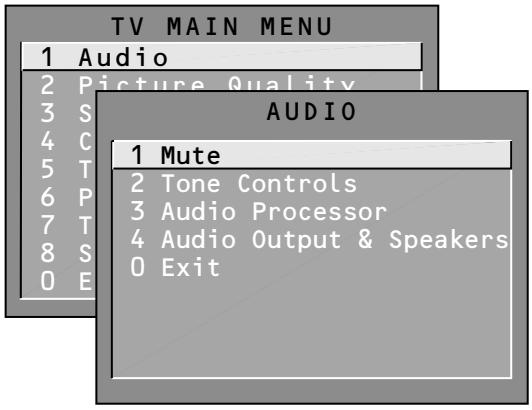
AUDIO MENU



Mute Press MENU to reduce the TV's volume to its minimum level. Press MENU again to restore the volume.

Tone Controls Displays the slider controls for adjusting the TV's treble, bass and balance.

Audio Processor Displays a choice list of available audio modes, which control the way the sound comes through your speakers.

Mono Plays the sound in mono only. Use this setting when receiving broadcasts with weak stereo signals .

Stereo Splits the incoming stereo audio signal into left and right channels. Most TV programs and recorded materials have stereo audio. The TV displays the word STEREO when you tune to a program that is broadcast in stereo.

Second Audio Program (SAP) Plays the program's audio in a second language, if one is available. The TV displays the word SAP when you tune to a program that is broadcast with SAP information. SAP audio is broadcast in mono.

Audio Output & Speakers Displays a choice list that lets you turn the TV's internal speakers on or off and set the audio outputs to fixed-level or variable control level.

Variable Output, Speakers On This setting turns the TV's speakers on and allows variable output from the TV's audio output jacks.

Variable Output, Speakers Off This setting turns the TV's speakers off and allows variable output from the TV's audio output jacks.

Fixed Output, Speakers Off This setting turns the TV's speakers off and allows fixed output from the TV's audio output jacks.

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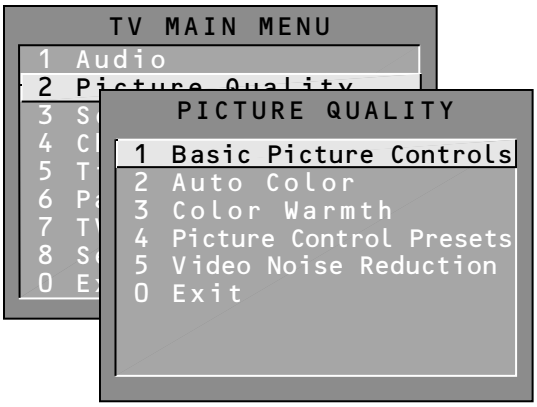
PICTURE QUALITY MENU



Basic Picture Controls Displays the five slider controls for adjusting the way the picture looks.

Contrast Adjusts the difference between the light and dark areas of the picture.

Color Adjusts the richness of the color.

Tint Adjusts the balance between the red and green levels.

Black Level Adjusts the brightness of the picture.

Sharpness Adjusts the crispness of edges in the picture.

Auto Color Displays a choice list that lets you turn on the feature that automatically corrects the color of the picture. (This is especially useful for tracking realistic flesh tone colors as you switch from channel to channel.) Choose *On* or *Off*, depending on your preference. It's your choice.

Color Warmth Displays a choice list that lets you set one of three automatic color adjustments: *Cool* for a more blue palette of picture colors; *Normal*; and *Warm* for a more red palette of picture colors.

Picture Control Presets Displays a choice list that lets you select one of three preset picture settings: *Bright Lighting*, *Normal Lighting* or *Soft Lighting*. Choose the setting that is best for your viewing environment.

Video Noise Reduction Displays a choice list that lets you turn on the feature that automatically reduces noise, or "snow," from the picture.

Press the RESET button on the remote to bring up the Picture Control Presets choice list. Point to the desired setting; press MENU to select it.

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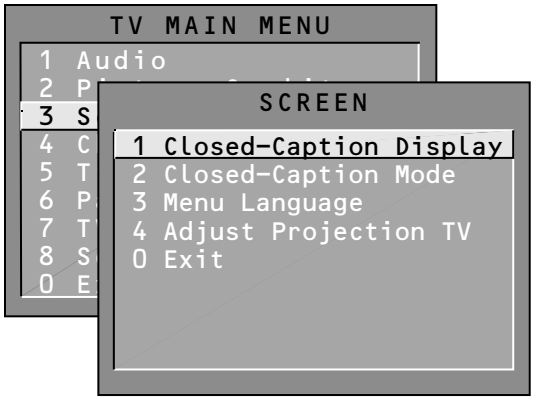
SCREEN MENU



Closed-Caption Display Displays a choice list that lets you choose the way closed captioning information is shown on the screen.

Off No captioning information displayed.

On Always Captioning information shown always, when available.

On When Sound is Muted Displays captioning information, when available, whenever the TV's sound is muted by pressing the MUTE button. The captioning information is not displayed when the sound is not muted.

Closed-Caption Mode Displays a choice list that lets you choose which captioning mode is used for displaying captioning information.

Menu Language Displays a choice list that lets you select your preferred language: *English*, *Spanish* or *French.*

Picture Tilt (31" screen size or above only) Your TV has an extra-large picture tube (31" or above), which makes it vulnerable to the effects of the Earth's magnetic field. You may need to adjust the picture tilt. Use the left and right arrow buttons to adjust the picture tilt.

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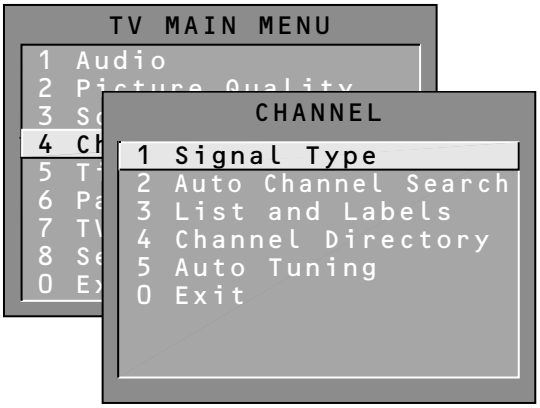
CHANNEL MENU



Signal Type Displays a choice list that lets you select the current antenna type. This option does not appear when the TV GUIDE Plus+ system is set up.

UHF/VHF Antenna Choose this if you are currently using an off-air antenna for TV signals.

Cable TV Choose this if you are currently using cable or a cable box for TV signals.

Auto Channel Search Tells the TV to search automatically for all the channels available through the antenna input. When the TV finds an active channel, it places it in the channel list; inactive channels (weak stations or channels with no signal at all) will be removed from the channel list.

List and Labels Displays a control panel that lets you custom-build your Normal channel list and choose a six-character label for each channel. Follow the on-screen directions to enter your channels and other information.

Chan # Use the up and down arrows to scroll up and down through the channel scan list. You can enter the channel number directly using the number buttons.

Normal List Only the channels included in the Normal list are available when you scan up and down using the CHAN buttons. Use the up and down arrows to indicate whether the channel number indicated is included (*Yes*) or is not included (*No*) in the Normal channel list.

Chan Labels Use the up and down arrows to enter a six-character label for each channel. Hold the button down to scroll quickly through the characters. Press RESET to clear a label. **The TV can store up to 27 labels in memory.**

Channel Directory Displays all of the labeled channels. In the Channel Directory control panel, you can select a channel by entering the channel number, or by pressing MENU to return to the current channel. This option does not appear when the TV GUIDE Plus+ system is set up.

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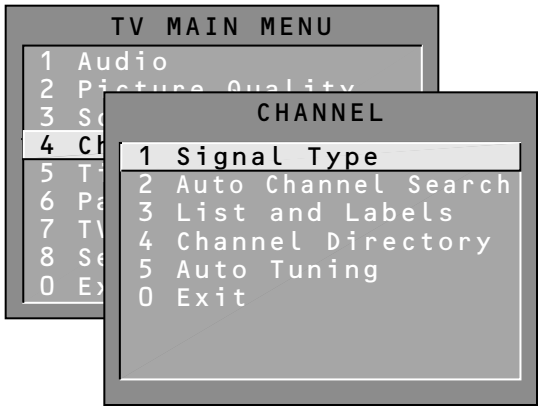
(Channel Menu continued)



Auto Tuning Displays a choice list that lets you set up the TV to automatically tune to the correct input channel when you press a component button (VCR1, DVD•VCR2, or SAT•CABLE).

Set VCR 1 Channel Displays a choice list that lets you select the channel that the TV tunes to when you press the VCR1 button.

Set DVD/VCR 2 Channel Displays a choice list that lets you select the channel that the TV tunes to when you press the DVD•VCR2 button.

Set SAT/Cable Channel Displays a choice list that lets you select the channel that the TV tunes to when you press the SAT•CABLE button.

The choices are:

Not Connected Choose this if you do not have a component connected to an antenna or video input on the back of the TV, or if you don't want the TV to tune to a channel when the particular component button is pressed.

Channel 2 (SAT/Cable only) Choose this if your component is connected to the antenna jack on the back of the TV, and you want the TV to tune to channel 2 when you press the specified component button. Reminder: Make sure the component's Ch 2/3/4 switch is set to channel 2.

Channel 3 Choose this if your component is connected to the antenna jack on the back of the TV, and you want the TV to tune to channel 3 when you press the specified component button. Reminder: Make sure the component's Ch 3/4 switch is set to channel 3.

Channel 4 Choose this if your component is connected to the antenna jack on the back of the TV, and you want the TV to tune to channel 4 when you press the specified component button. Reminder: Make sure the component's Ch 3/4 switch is set to channel 4.

Video 1 Input Choose this if your component is connected to the Video 1 jacks on the back of the TV and you want the TV to tune to Video1 input when you press the specified component button.

Video 2 Input Choose this if your component is connected to the Video 2 jacks on the back of the TV and you want the TV to tune to Video 2 input when you press the specified component button.

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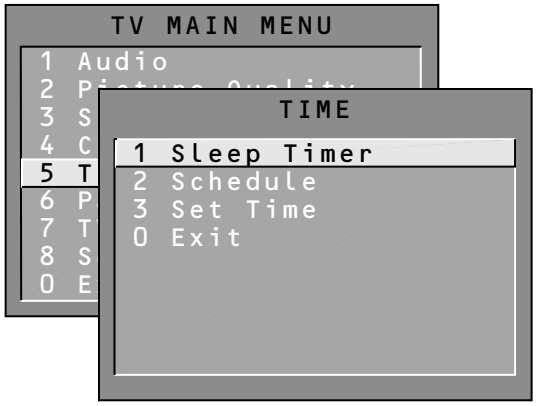
TIME MENU



Sleep Timer Displays a control panel that lets you select the amount of time you want to give the TV before it shuts itself off.

Schedule Displays a control panel that lets you set up a schedule for turning the TV on and off automatically. **Make sure to turn the schedule On.** The on-screen directions guide you through the steps needed to set the schedule.

Set Time Displays a control panel that lets you enter the current time. The on-screen directions guide you through the steps needed to set the time.

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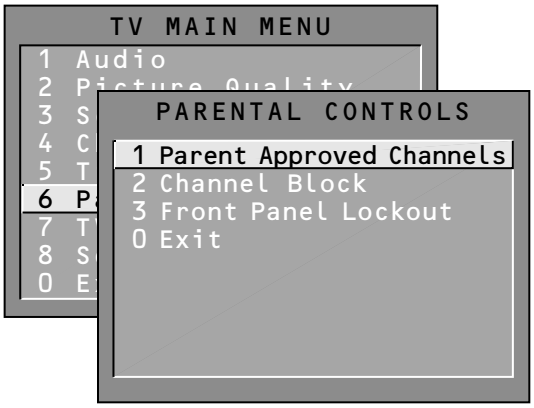
PARENTAL CONTROLS MENU



Displays the menu items that let you adjust the Parental Controls feature.

Parent Approved Channels Displays a control panel that lets you decide what channels can be viewed or selected using the TV's front panel controls.

Chan # Use the up and down arrows to scroll up and down through the channel scan list. You can enter the channel number directly using the number buttons.

Parent Approved Use the up and down arrows to choose whether the channel indicated should be shown when the Channel Block feature is turned on. Select *Yes* to indicate that the channel can be shown at any time, regardless of whether Channel Block is turned on. Select *No* to indicate that the front panel cannot tune to that channel when Channel Block is turned on. **Important:** You must turn the Channel Block feature on. (See Channel Block, below.)

Channel Block Displays a control panel that lets you decide when a channel can be viewed.

Off All channels are available

On Always The front panel CH (channel) buttons will tune only to channels that you have marked as "Parent Approved." The remote will still tune to any channel.

Scheduled Selected channels will be blocked out between start and stop times you enter in the control panel. The front panel CH (channel) buttons will tune only to channels that you have marked as "Parent Approved." The remote will still tune to any channel.

Front Panel Lockout Displays a control panel that lets you lock (disable) the TV's front control panel, or unlock (enable) the TV's front control panel. The remote will still tune to any channel.

If you can't access a channel or use the TV's front panel control, maybe you've forgotten to turn off a parental control. Check the Channel Block and Front Panel Lockout control panels.

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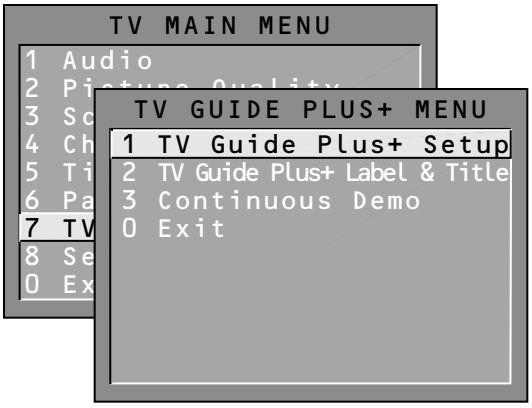
TV GUIDE PLUS+



TV GUIDE Plus+ Setup Displays the TV GUIDE Plus+ setup screen.

Setup Setting up the TV GUIDE Plus+ system is detailed earlier in *Interactive Setup.*

Demo Runs the TV GUIDE Plus+ demonstration.

Select Channels Allows you to choose which channels appear in the TV GUIDE Plus+ program schedule.

TV Guide Plus+ Label & Title Displays the TV GUIDE Plus+ Label & Title menu.

On Displays the station name and shows title when you change channels.

Off Disables the Label & Title feature.

Continuous Demo Runs the TV GUIDE Plus+ demonstration until it is turned off.

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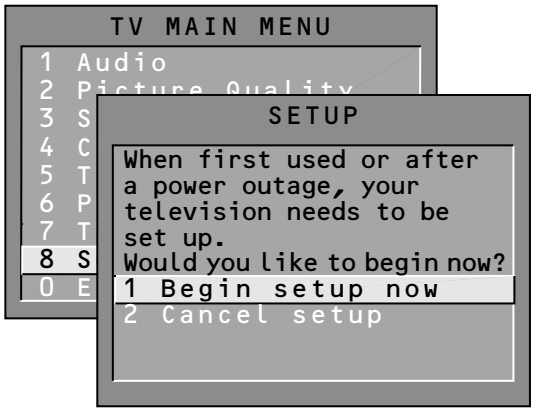
QUICK REFERENCE

SETUP MENU

The setup routine is detailed earlier in the manual in the Interactive Setup section.


TV MAIN MENU
1 Audio
SETUP
When first used or after a power outage, your television needs to be set up.
Would you like to begin now?
1 Begin setup now
2 Cancel setup

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ADVANCED FEATURES

THIS SECTIONS DETAILS SOME OF THE TV'S IMPORTANT FEATURES:

- TV GUIDE Plus+ operation
- PIP (Picture-in-Picture) operation
- Choosing an audio processor
- Using closed captioning
- Displaying on-screen program details

For more about the different menus and control panels in the menu system, see the *Quick Reference* section.

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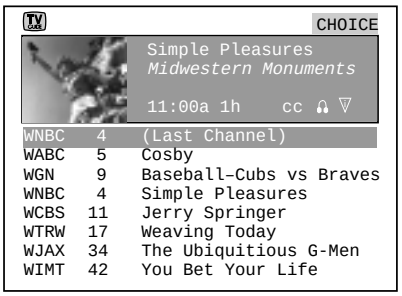
TV GUIDE PLUS+ OPERATION

The TV GUIDE Plus+ system offers four different menus for browsing program listings: SURF, NEXT, SCAN, and SORT.

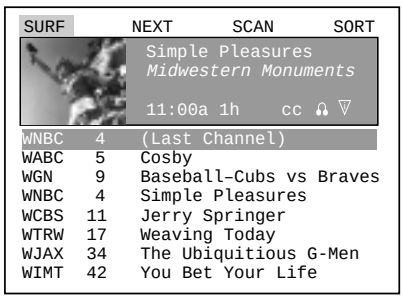
1. Press GUIDE to bring up the TV GUIDE Plus+ display.



2. To choose a menu, select *CHOICE*. The Surf Menu comes up by default.
3. Use the left and right arrows to access another menu. Press MENU to select your choice.

Surf Menu

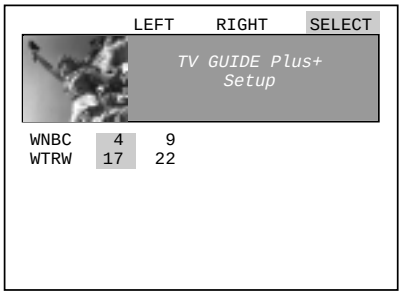
The Surf Menu displays the current program on each channel. The live program displayed in the video window changes as you surf channel listings.



- Use the up and down arrows to surf channel listings.
- To select another menu, use the left and right arrows, and then press MENU.
- Press GUIDE or CLEAR to exit the TV GUIDE Plus+ system. Pressing GUIDE changes to the last channel highlighted. Pressing CLEAR returns to the original channel.

Channel Mapping

If more than one cable company services your area, you may be prompted with this Channel Mapping screen after the first TV GUIDE Plus+ download. You will need to identify your cable company by selecting the correct channel numbers for the stations in question.



1. **Determine the correct channels for the stations. Check your local listings if you are not sure.**
2. **Select *LEFT* or *RIGHT* to change the channel group.**
3. **Select *SELECT* when the correct channel group is highlighted.**

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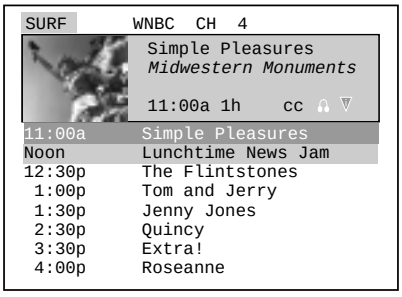
ADVANCED FEATURES

Next Menu

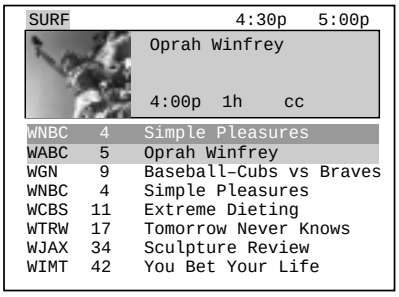
The Next Menu displays the programs on a selected channel from the current time to midnight of the next day.



- Use the up and down arrow buttons to move through the schedule. An asterisk after the time indicates that the program is scheduled for tomorrow.
- Use the right and left arrows to select a different menu, or press GUIDE or CLEAR to exit the TV GUIDE Plus+ system.

Scan Menu

The Scan Menu shows programming schedules for all channels from the current time to midnight on the following day.



- Use the left and right arrows to select the time of day.
- Use the up and down arrows to move through the schedule. The channel displayed in the video window remains on the initial channel.
- Select *SURF* to return to the surf menu, or press GUIDE or CLEAR to exit the TV GUIDE Plus+ system.

The Info Center

If this icon appears in the program information, you may access additional information about that program by pressing INFO. This feature is available in all four menus.

Even if the icon isn't displayed, pressing INFO will show a PlusCode programming number which allows you to program your VCR to record using VCR Plus+.

Press INFO a second time to return to the TV GUIDE Plus+ menu.

Alternately, you will find the Info Center in the Surf and Sort menus. Select it to view additional information.

Along with additional programming information, the Info Center may contain information on local events, or on the TV GUIDE Plus+ system itself. Information contained in the info center will vary from area to area, so not all of these options may be available to you at this time.

Press INFO to exit back to the menu.

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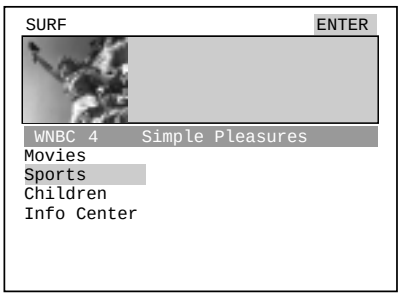
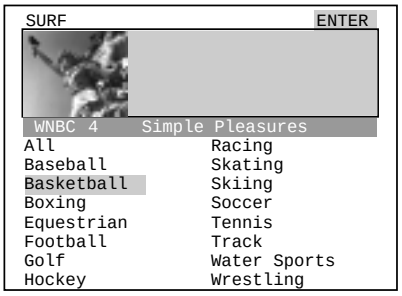
Sort Menu

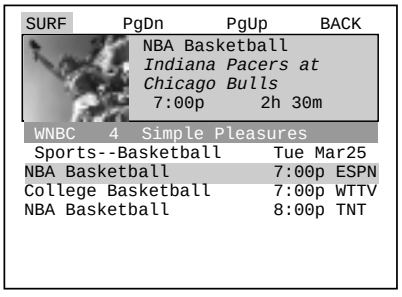
The Sort Menu lets you browse programs by category. The channel you are currently tuned to is displayed in the video window and by name.



1. Use the up and down arrows to select a category. In this example we'll choose *Sports*. A listing of subcategories comes up.



2. Use the up and down arrows to select a subcategory, in this example *Basketball*. The message, "Searching in progress. Please Wait" comes up.

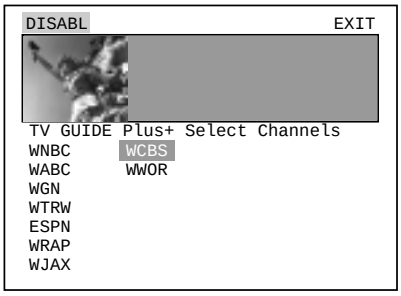


3. When the listing comes up, select *PgDn* to view more entries. Seven days of programming are listed in the Sort Menu.
4. Select *SURF* to return to the surf menu, or press GUIDE or CLEAR to exit the TV GUIDE Plus+ system.

Customizing Your Channel Listing

You may customize the channel listing by enabling or disabling the display of certain channels. For instance, you may disable channels that you never watch. You can restore disabled channels at a later point in time, of course.

1. **From the TV's Main Menu, select *TV Guide Plus+* Menu.**
2. **Select *TV Guide Plus+ Setup.* The TV GUIDE Plus+ menu comes up.**
3. **Select *Select Channels.***



4. **Use the up and down arrows to select a channel.**
5. **Select *ENABLE* or *DISABL* to add or remove a channel from the guide's listing. Note that this button's name changes depending on the activation status of the selected channel.**
6. **Select *EXIT* when you are finished.**

Selected channels will be added or removed from the list during the next download.

Sort Menu Options

***PgDn* shows more listings**

***PgUp* returns to the previous screen.**

***BACK* allows you to select another category to sort.**

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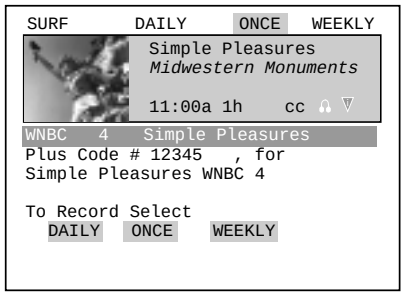
ADVANCED FEATURES

One-Button Recording

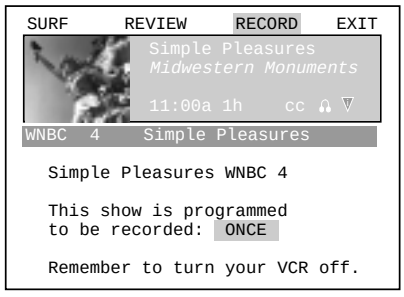
The TV GUIDE Plus+ system allows one-button recording if you have connected the IR controller to your VCR. See *First Things First* for more details on connecting the IR controller.

1. Press GUIDE to bring up the TV GUIDE Plus+ menu.

2. Select a program to record. You may choose a program from any of the four browsing menus.
3. Press REC•VCR+. A screen confirming your selection comes up.



4. Select a recording option: *DAILY, ONCE,* or *WEEKLY.*



5. Insert a blank tape into your VCR and turn it off.

Recording Options

DAILY **records the same program Monday through Friday.**

ONCE **records only on that day.**

WEEKLY **records the program each week at the same time.**

REVIEW **displays a list of programs set to be recorded. You may delete programs from this list.**

Tip: You can record the program you are currently watching by simply pressing REC•VCR+.

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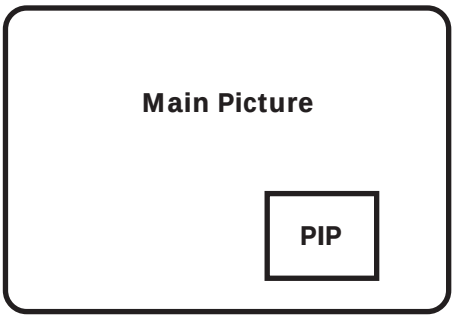
ADVANCED FEATURES

PIP (PICTURE-IN-PICTURE) OPERATION

The PIP (picture-in-picture) feature lets you display a second, smaller picture on top of the main picture.

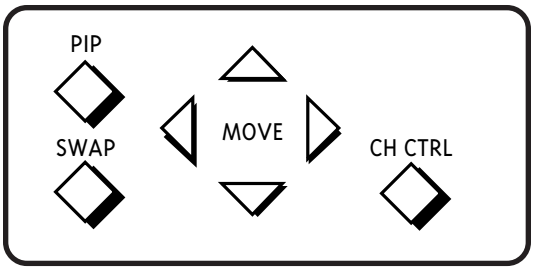


A BRIEF EXPLANATION

Your TV is equipped with a single tuner that tunes to cable or off-air television signals. The PIP feature on your TV requires a second video source, like a VCR or satellite receiver to supply the second picture to the screen. The PIP feature also requires connecting the second video source to the TV with audio/video cables.

PIP Buttons

There are seven remote buttons that control the way the PIP window works:



PIP Brings up the PIP window. Press PIP again to remove the window.

MOVE buttons Let you move the PIP window to different areas of the screen.

SWAP Switches, or "swaps," the video from the PIP window with the main picture.

CH CTRL (Channel Control) Lets you switch channel control between the PIP window and the main picture.

A typical use of SWAP is to scan through channels in the PIP window, and when you find a channel you like, press SWAP to display that channel in the main picture, sending the current channel to the PIP window.

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ADVANCED FEATURES

Using the PIP Feature

While you may use PIP in different ways, this basic PIP scenario should get you started. While watching the TV, follow these steps to use your VCR to supply the picture for PIP.

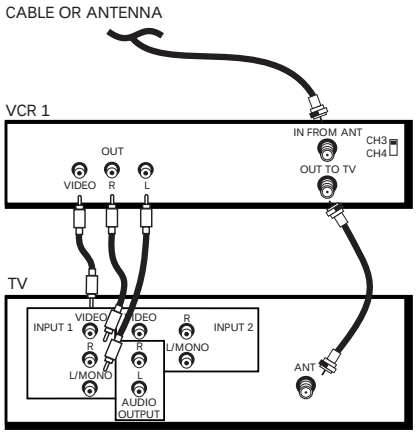
1. Press the PIP button on the remote. The PIP window appears on the screen. Notice the channel marker at the bottom of the screen displays the current PIP channel, not the main picture channel.
2. Turn on the VCR and tune the PIP channel to receive the VCR signal (Video1 or Video2).

   Tip: You can turn the VCR on and tune to the VCR channel with the press of a button. For example, if you program the Autotune feature, you can tune to the Video1 input channel when you press the VCR1 button on the remote. In PIP mode, pressing the VCR1 button tunes the PIP window to the Video1 input channel.
3. Use the channel up and down buttons and the other PIP buttons, MOVE, SWAP and CH CTRL to adjust the two pictures.

PIP Problems?

- Make sure the remote is in the right mode. For example, once you turn on the VCR with the VCR1 button, you can't SWAP the pictures until you put the remote in TV mode. Just press the TV button.
- No signal or bad reception? Most VCRs and satellite receivers have an antenna or TV button. If your cable or off-air antenna goes into your VCR or satellite receiver, then into your TV, try pressing the antenna or TV button on the front of the component.

  Tip: If programmed to control your VCR, the ANTENNA button on the remote acts as a TV/VCR button.
- Check the connections. PIP requires a second video source, like a VCR or satellite receiver, connected to your TV with audio/video cables. If you use a cable box, you may need extra equipment. Contact your cable company for more information.



To see a different picture in the PIP window, you must connect another video source, like a VCR. This connection also requires audio/video cables.

You can program the TV to tune to a specific channel when you press the VCR1, SAT•CABLE, and DVD•VCR2 buttons. This is an easy way to tune the PIP window to the correct video input channel.

Check out the Autotuning feature in the Interactive Setup and Quick reference sections.

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CHOOSING AN AUDIO PROCESSOR

Changing the audio processor changes the way your TV sounds. There are two ways to change the audio processor: a) from the Audio menu, and b) by pressing SOUND on the remote. For more, see Audio menu in the Quick Reference section.

Choosing an audio processor from the Audio menu

1. Press MENU to bring up the Main menu.
2. Press MENU again to select the Audio menu.
3. Point to *Audio Processor* and press MENU. The Audio Processor choice list comes up, with the current mode highlighted.
4. Point to an audio processor mode and press MENU to select it and return to the Audio menu. The options are:

   Mono Plays the sound in mono only.

   Stereo Splits the incoming stereo audio signal into left and right channels.

   Second Audio Program (SAP) Plays the program's audio in a second language, if one is available. Setting the audio processor to SAP tells the TV to play the program's audio in this second language, if one is available.

Choosing an audio processor from the remote

1. Press SOUND to display the audio processor choice list.
2. Point to and select a different audio processor or press CLEAR to exit.

The number of audio processor choices available depends on the type of signal you are currently using. For example, depending on the way you have your VCR connected to the TV, the number of choices is greater when you are watching TV than when you are watching a video tape.

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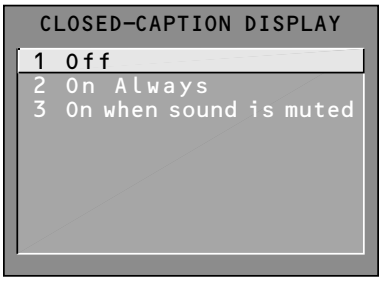
ADVANCED FEATURES

CLOSED CAPTIONING

Many programs are encoded with closed captioning information, which lets you display the audio portion of a program as text on the TV screen. You can tell the TV to display closed captioning: a) never, b) whenever it is available, or c) whenever the program is muted.

TO DISPLAY CLOSED CAPTIONING

1. Press MENU to bring up the Main menu.
2. Point to *Screen* and press MENU. The Screen menu comes up with Closed-Caption Display highlighted.
3. Press MENU to select *Closed-Caption Display*.



Off No closed captioning information will be displayed.

On Always Closed captioning will be displayed whenever it is available.

On when sound is muted Closed captioning will be displayed only when you have muted the sound by pressing the MUTE button.

4. Point to your choice and press MENU to select it and return to the Screen menu.

Closed captioning is not available on all channels at all times. Only specific programs encoded with closed captioning information are applicable. When a program is closed captioned, the letters CC are displayed in the channel marker.

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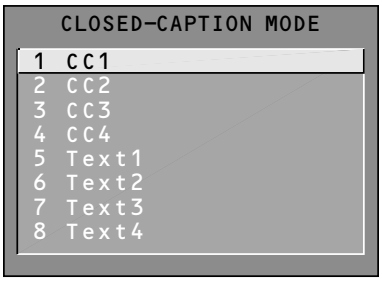
CLOSED CAPTIONING MODES

The TV offers eight closed-captioned modes, including four text modes.

To Set the Closed-Captioning Mode:

1. Select *Screen* from the Main menu
2. Point to *Closed-Caption Mode* and press MENU. This choice list comes up:



3. Point to your choice and press MENU to select it and return to the Screen menu.

Turning off Closed Captioning

1. Select *Screen* from the Main menu.
2. Press MENU to select *Closed-Caption Display*
3. Point to *Off* and press MENU. The closed captioning is turned off and you are returned to the Screen menu.

If you are unsure of the differences among the modes, you may prefer to leave the closed captioned mode set to CC1, which displays complete text of the program in the primary language in your area.

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ON-SCREEN PROGRAM DETAILS

Program providers have the option of sending information through the airwaves along with their programs. If this information is available, the TV can display it up when you press INFO on the remote. To display the on-screen program details:

1. Press INFO once to bring up the channel marker.
2. Press INFO again to bring up the program title, the program's length and elapsed time.
3. Press INFO again to bring up other program details such as the story line and whether Closed-Captioning is available.
4. Press INFO again to clear the screen.

Whether all (or any) of the program details are displayed depends on whether the program provider has sent the information along with the program.

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APPENDIX A: CONNECTIONS

THINGS TO DO BEFORE CONNECTING COMPONENTS

Protect your components from power surges

- Connect all components before plugging any power cords into the wall outlet.
- Always turn off the TV and/or component before you connect or disconnect any cables.

POSITION CABLES CORRECTLY TO AVOID AUDIO HUM OR INTERFERENCE

- Insert all cable plugs firmly into their jacks.
- Place the audio/video cables to the sides of the TV's back panel instead of straight down the middle after you connect your components.
- Try not to coil any twin-lead cables and keep them away from the audio/video cables as much as possible.
- Make sure all antennas and cables are properly grounded. Refer to the Safety Tips sheet packed with your TV.

PROTECT YOUR COMPONENTS FROM OVERHEATING

- Do not block ventilation holes in any of the components. Arrange the components so that air can circulate freely.
- Do not stack components.
- Allow adequate ventilation when placing your components in a stand.
- Place an amplifier on the top shelf of the stand so heated air rising from it will not flow around other components.

Important:

This section assumes that you have already used the Interactive Setup and programmed the remote.

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APPENDIX A: USING CONNECTION A

TV AND MONO VCR (CONNECTION A)

This information applies to Connection A in the Connections Foldout.

Connection A provides:

- stereo sound from broadcast programs
- mono sound from VCR
- Picture in Picture (PIP)
- watch one channel on TV while recording another channel

To use this connection you must have:

- (2) audio/video cables
- (2) coaxial cables

To connect:

1. Connect cables as shown in Connection A.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

USING CONNECTION A

To watch TV programs:

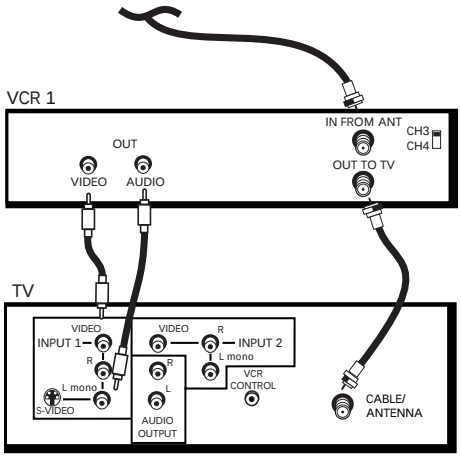
1. Turn VCR off.
2. Press TV and tune to a channel.

To record one program and watch another:

1. Press VCR1 and tune to a channel.
2. Begin recording.
3. Make sure the TV/VCR switch on the VCR is set to TV.
4. Press TV and tune to a channel.

To play a tape on the VCR:

1. Press VCR1.
2. Press PLAY.



See Connections Foldout, Connection A

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APPENDIX A: USING CONNECTION B

TV AND STEREO VCR (CONNECTION B)

This information applies to Connection B in the Connections Foldout.

Connection B provides:

- stereo sound from broadcast programs
- stereo sound from VCR
- Picture in Picture (PIP)
- watch one channel on TV while recording another channel

To use this connection you must have:

- (2) coaxial cables
- (3) audio/video cables
- (1) S-Video cable (optional)

To connect:

1. Connect cables as shown in Connection B.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

USING CONNECTION B

To watch TV programs:

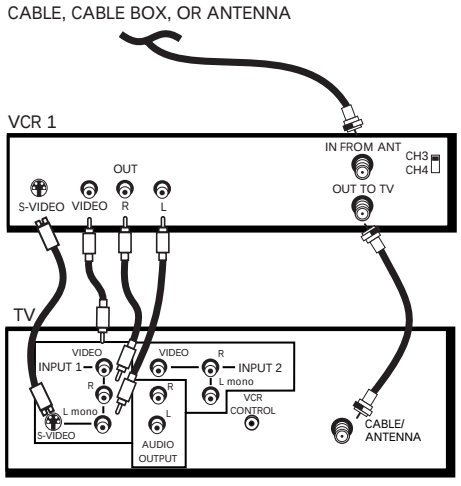
1. Turn VCR off.
2. Press TV and tune to a channel.

To record one program and watch another:

1. Press VCR1 and tune to a channel.
2. Begin recording.
3. Make sure the TV/VCR switch on the VCR is set to TV.
4. Press TV and tune to a channel.

To play a tape on the VCR:

1. Press VCR1.
2. Press PLAY.



See Connections Foldout, Connection B

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APPENDIX A: USING CONNECTION C

TV, VCR AND DVD PLAYER (CONNECTION C)

This information applies to Connection C in the Connections Foldout.

Connection C provides:

- stereo sound from broadcast programs
- stereo sound from VCR
- Picture in Picture (PIP)
- watch one channel on TV while recording another channel

To use this connection you must have:

- (2) coaxial cable
- (6) audio/video cables
- (1) S-Video cable (optional)

To connect:

1. Connect cables as shown in Connection C.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

USING CONNECTION C

To watch TV programs:

1. Turn VCR off.
2. Press TV and tune to a channel.

To record one program and watch another:

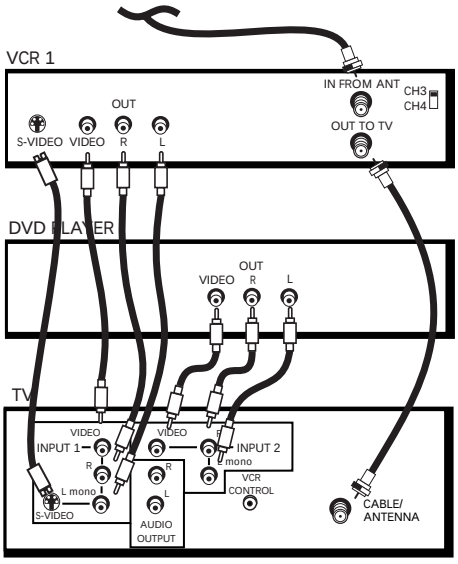
1. Press VCR1 and tune to a channel.
2. Begin recording.
3. Make sure the TV/VCR switch on the VCR is set to TV.
4. Press TV and tune to a channel.

To play a tape on the VCR:

1. Press VCR1.
2. Press PLAY.

To play a disc:

1. Press DVD•VCR2.
2. Press PLAY.



See Connections Foldout, Connection C

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APPENDIX A: USING CONNECTION D

TV AND (2) VCRS (CONNECTION D)

This information applies to Connection D in the Connections Foldout.

Connection D provides:

- stereo sound from broadcast programs
- stereo sound from VCR
- Picture in Picture (PIP)
- watch one channel on TV while recording another channel
- record from one VCR to the other

To use this connection you must have:

- (3) coaxial cable
- (6) audio/video cables
- (1) S-Video cable (optional)

To connect:

1. Connect cables as shown in Connection D.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

You can record from one tape to another (tape dubbing):

1. **Insert original tape into VCR2.**
2. **Insert blank tape into VCR1.**
3. **Press VCR1.**
4. **Set VCR to line input (for more, see your VCR User Manual).**
5. **Press RECORD to begin recording.**
6. **Press DVD•VCR2, then press PLAY.**
7. **If you want to watch a different channel, set both the TV/VCR switch on both VCRs to TV; press TV; then tune to a channel.**

Note: The unauthorized recording of satellite broadcasts, television programs, or other copyrighted materials may infringe the rights of others.

USING CONNECTION D

To watch TV programs:

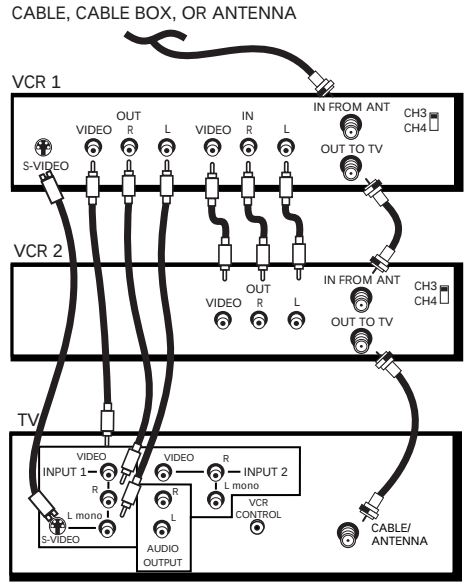
1. Turn VCR off.
2. Press TV and tune to a channel.

To record one program and watch another:

1. Turn VCR2 off.
2. Press VCR1 and tune to a channel.
3. Begin recording.
4. Make sure the TV/VCR switch on the VCR1 is set to TV.
5. Press TV and tune to a channel.

To play a tape on the VCR:

1. Press VCR1.
2. Press PLAY.



See Connections Foldout, Connection D

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APPENDIX A: USING CONNECTION E

TV AND DVD PLAYER (CONNECTION E)

This information applies to Connection E in the Connections Foldout.

Connection E provides:

- stereo sound from broadcast programs
- Picture in Picture (PIP)

To use this connection you must have:

- (1) coaxial cable
- (3) audio/video cables
- (1) S-Video cable (optional)

To connect:

1. Connect cables as shown in Connection E.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

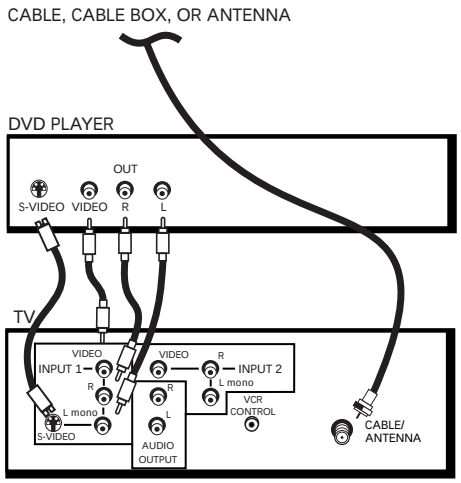
USING CONNECTION E

To watch TV programs:

1. Press TV and tune to a channel.

To play a disc:

1. Press DVD•VCR2.
2. Press PLAY.



See Connections Foldout, Connection E

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APPENDIX A: USING CONNECTION F

TV AND SATELLITE RECEIVER (CONNECTION F)

This information applies to Connection F in the Connections Foldout.

Connection F provides:

- stereo sound from broadcast programs
- stereo sound from the satellite receiver
- Picture in Picture (PIP)

To use this connection you must have:

- (3) coaxial cable
- (3) audio/video cables
- (1) S-Video cable (optional)
- stereo sound from satellite programming

To connect:

1. Connect cables as shown in Connection F.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

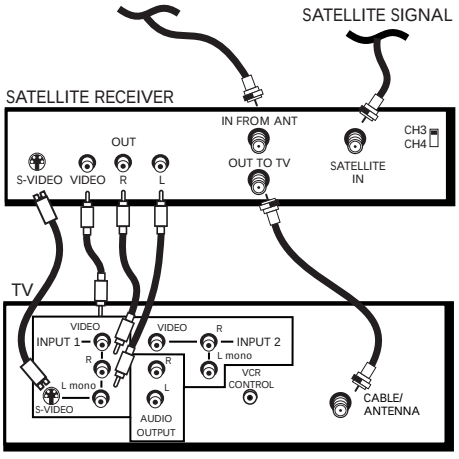
USING CONNECTION F

To watch TV programs:

1. Turn satellite receiver off.
2. Press TV and tune to a channel.

To watch satellite programming:

1. Press SAT•CABLE and tune to a channel.



See Connections Foldout, Connection F

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APPENDIX A: USING CONNECTION G

TV, VCR, AND SATELLITE RECEIVER (CONNECTION G)

This information applies to Connection G in the Connections Foldout.

Connection G provides:

- stereo sound from broadcast programs
- stereo sound from VCR
- Picture in Picture (PIP)
- watch one channel on TV while recording another channel

To use this connection you must have:

- (4) coaxial cable
- (6) audio/video cables
- (1) S-Video cable (optional)

To connect:

1. Connect cables as shown in Connection G.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

USING CONNECTION G

To watch TV programs:

1. Turn VCR and satellite receiver off.
2. Press TV and tune to a channel.

To watch Satellite programming:

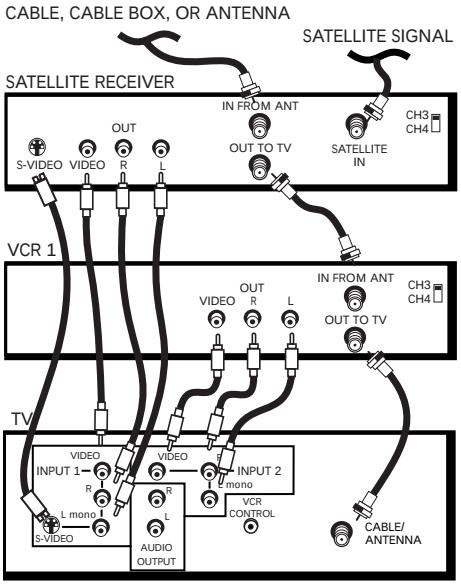
1. Press SAT•CABLE and tune to a channel.

To record off-air broadcasts and watch a different channel:

1. Turn satellite receiver off.
2. Press VCR1 and tune to a channel.
3. Begin recording.
4. To watch another channel, make sure the TV/VCR switch on the VCR is set to TV; then press TV and tune to a channel.

To play a tape on the VCR:

1. Press VCR1 and then press PLAY.



See Connections Foldout, Connection G

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APPENDIX A: USING CONNECTION H

TV, VCR, SATELLITE RECEIVER, AND DVD PLAYER (CONNECTION H)

This information applies to Connection H in the Connections Foldout.

Connection H provides:

- stereo sound from broadcast programs
- stereo sound from VCR
- Picture in Picture (PIP)
- watch one channel on TV while recording another channel

To use this connection you must have:

- (4) coaxial cable
- (6) audio/video cables
- (1) S-Video cable (optional)

To connect:

1. Connect cables as shown in Connection H.
2. Return to *First Things First*, and do the Interactive Setup.

USING CONNECTION H

To watch TV programs:

1. Turn VCR and satellite receiver off.
2. Press TV and tune to a channel.

To watch satellite programming:

1. Press SAT•CABLE and tune to a channel.

To record off-air (cable or antenna) broadcasts and watch a different channel:

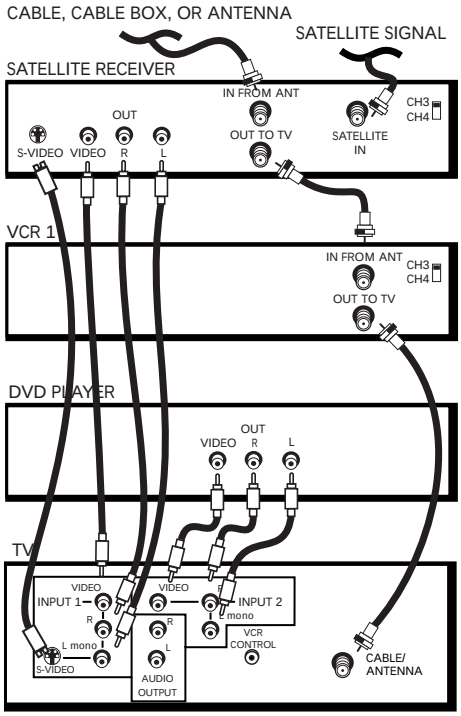
1. Turn satellite receiver off.
2. Press VCR1 and tune to a channel.
3. Press RECORD to begin recording.
4. To watch another channel, make sure the TV/VCR switch on the VCR is set to TV; then press TV and tune to a channel.

To play a tape on the VCR:

1. Press VCR1 and then press PLAY.

To play a disc:

1. Press DVD•VCR2 and then press PLAY.



See Connections Foldout, Connection H

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APPENDIX A: USING CONNECTION I

TV, (2) VCRS, AND SATELLITE RECEIVER (CONNECTION I)

This information applies to Connection I in the Connections Foldout.

Connection I provides:

- stereo sound from broadcast programs
- stereo sound from VCR
- Picture in Picture (PIP)
- watch one channel on TV while recording another channel

To use this connection you must have:

- (5) coaxial cable
- (9) audio/video cables
- (1) S-Video cable (optional)

To connect:

1. Connect cables as shown in Connection I.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

USING CONNECTION I

To watch TV programs:

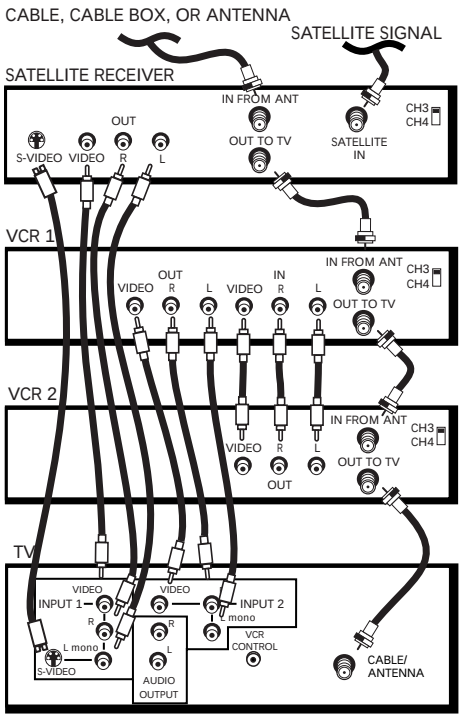
1. Turn VCR and satellite receiver and laserdisc player off.
2. Press TV and tune to a channel.

To watch Satellite programming:

1. Press SAT•CABLE and tune to a channel.

To record from one VCR to the other (tape dubbing):

1. Turn satellite receiver off.
2. Insert original tape into VCR2.
3. Insert blank tape into VCR1.
4. Press VCR1.
5. Set VCR to line input (for more, see your VCR User Manual).
6. Press RECORD to begin recording.
7. Press DVD•VCR2, then press PLAY.
8. If you want to watch a different channel, set the TV/VCR switch on both VCRs to TV; press TV; then tune to a channel.



See Connections Foldout, Connection I

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APPENDIX A: USING CONNECTION I

To record off-air (cable or antenna) broadcasts and watch a different channel:

1. Turn off VCR2.
2. Insert blank tape into VCR1.
3 Press VCR1 and tune to a channel.
4. Press RECORD to begin recording
5. To watch another channel, make sure the TV/VCR switch on the VCR is set to TV; then press TV and tune to a channel.

To play a tape on VCR1:

1. Press VCR1 and then press PLAY.

Note: The unauthorized recording of satellite broadcasts, television programs, or other copyrighted materials may infringe the rights of others.

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APPENDIX B: OTHER COMPONENTS

CONNECTING AUDIO COMPONENTS

CONNECTING A STEREO AMPLIFIER

1. Connect the amplifier's TV audio inputs to the left (L) and right (R) AUDIO OUTPUT jacks.
2. You may prefer to turn off the TV's internal speakers by selecting *Audio Output and Speakers* from the Audio menu, then turning the speakers off.

   If your audio amplifier is part of a system that uses its own remote control, you may prefer to select the fixed output settings.

   Important: Do not use the amplifier's PHONO inputs. If the amplifier is not stereo, use the left (L) AUDIO OUT jack. Consult the amplifier's owner's manual for the manufacturer's recommended hookup.

CONNECTING A SUBWOOFER

To connect a subwoofer to the TV:

1. Connect the subwoofer's audio input to the left (L) AUDIO OUT jack.

CONNECTING A TAPE DECK

To use a tape deck to record audio from TV:

1. Connect the tape deck's audio inputs to the AUDIO OUTPUT jacks on the back of the TV.

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APPENDIX B: OTHER COMPONENTS

CONNECTING A CAMCORDER FOR PLAYBACK

This connection is recommended for playing back from the camcorder to the TV:

1. Connect the camcorder's audio/video outputs to the INPUT 1 or INPUT 2 audio and video jacks on the TV.
2. Press INPUT on the remote until the channel marker displays VID1.
3. Start playback on the camcorder.

PLAYBACK FROM AN S-VHS CAMCORDER

To connect a camcorder with S-Video capability:

1. Connect an S-Video cable from the camcorder to the S-VIDEO jack on the TV.
2. Connect the camcorder's audio/video outputs to the INPUT 1 audio and video jacks on the TV.
3. Press INPUT on the remote until the channel marker displays VID1.
4. Start playback on the camcorder.

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APPENDIX C: TROUBLESHOOTING

TROUBLESHOOTING

Troubles sometimes are caused by simple "faults" that you can correct without the help of a service technician. If you experience any difficulty with your TV, check a few basic remedies before calling your service technician.

TV will not turn on

- Check to make sure it is plugged in.
- Check the wall receptacle (or extension cord) to make sure it is "live" by plugging in something else.
- Maybe batteries in remote control are "dead."
- Maybe remote control is not aimed at remote sensor.
- The front panel controls may be locked (disabled). Use the remote control to unlock the front panel controls by selecting the *Front Panel Lockout* in the Parental Controls menu and choosing *Unlock*.

Controls don't work

- If using remote control, make sure remote is in TV mode by first pressing TV button.
- Try unplugging set for two minutes and then plug it back in and turn it on again.
- The front panel MENU button may be disabled. Use the remote control to turn off channel blocking. Select *Channel Block* in the Parental Controls menu and choose *Off*.

Problems with Remote

- Maybe something is between the remote and the remote sensor.
- Maybe the remote is not aimed directly at the component (TV or VCR) you are trying to control.
- Maybe remote is not in TV Mode. Press the TV button so remote will control TV.
- Maybe batteries in remote are weak, dead or installed incorrectly. Try replacing batteries. (Note, if you remove the batteries, you may have reprogram the remote to control other components.)
- Remove batteries and hold number 1 for at least 60 seconds to drain the microprocessor inside the remote. Release number 1, replace the batteries, and (if necessary) reprogram the remote.
- Remove all batteries for approximately 12 hours. Then replace batteries and (if necessary) reprogram the remote.

Turns off while playing

- Schedule function may have been activated.
- Electronic protection circuit may have been activated because of a power surge. Wait 30 seconds and then turn on again. If this happens frequently, the voltage in your house may be abnormally high or low.

TV Turns on unexpectedly

- Schedule On function may have been activated.

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APPENDIX C: TROUBLESHOOTING

Blank screen

- Maybe the device connected to the input jacks is not turned on.
- Try another channel.
- Press RESET, in case the picture controls are set too low.

No sound, picture okay

- Maybe sound is muted. Try pressing volume up button to restore sound.
- Maybe speakers are turned off. Check the Audio Output and Speakers control panel in the Audio menu.
- If using an S-VHS component, remember to also connect the component's L and R AUDIO OUT jacks to the TV's L and R INPUT 1 jacks.

Can't select certain channel

- Channel may be blocked or not approved in the Parental Controls menu.
- If using a VCR, check to make sure the TV/VCR switch on the VCR is in the correct position.

Noisy stereo reception

- May be a weak station. Use SOUND button to change to mono mode instead of stereo.

No picture, no sound but TV is on

- Maybe the cable/air function is set to the wrong position.
- Maybe a vacant channel is tuned.
- If watching VCR (connected only through antenna input), make sure TV is tuned to channel 3 or 4 – same as CH3/4 switch on VCR. Also check to make sure TV/VCR switch on VCR is in correct position.

Sound okay, picture poor

- Check antenna connections.
- Try adjusting sharpness function to improve weak signals.

Black Box appears on the screen

- Captioning may be turned on. Check the Closed-Caption Display control panel in the Channel menu.

TV GUIDE Plus+ IR Controllers not working

- Check to make sure the controllers are positioned correctly over the IR remote sensors.
- Your remote may be interfering with the IR controller. Place a piece of dark tape over the IR controller.
- TV GUIDE Plus+ control of cable box is slower than direct control of the box itself. Keep this in mind when changing channels.

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APPENDIX D: LIMITED WARRANTY

What your warranty covers:

- Any defect in materials or workmanship.

For how long after your purchase:

- One year for labor charges.
- One year for parts.
- Two years for picture tube.

(The warranty period for rental units begins with the first rental or 45 days from date of shipment to the rental firm, whichever comes first.)

What we will do:

- Pay any Authorized RCA Television Servicenter the labor charges to repair your television.
- Pay any Authorized RCA Television Servicenter for the new or, at our option, refurbished replacement parts and picture tube required to repair your television.

How you get service:

- Request home service from any Authorized RCA Television Servicenter. To identify your nearest Authorized RCA Television Servicenter, ask your dealer, look in the Yellow Pages, or call **1-800-336-1900.**
- Show the service technician your evidence of purchase date or first rental.

What your warranty *does not* cover:

- Customer instruction. (Your Owner's Manual clearly describes how to install, adjust, and operate your television. Any additional information should be obtained from your dealer.)
- Installation and related adjustments.
- Signal reception problems not caused by your television.
- Damage from misuse or neglect.
- Batteries.
- Images burnt onto the screen.
- A television that has been modified or incorporated into other products or is used for institutional or other commercial purposes.
- A television purchased or serviced outside the USA.
- Acts of God, such as but not limited to lightning damage.

Product Registration:

- Please complete and mail the Product Registration Card packed with your television. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

How state law relates to this warranty:

- This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

If you purchased your product outside the USA:

- This warranty does not apply. Contact your dealer for warranty information.

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APPENDIX E: CARE AND CLEANING

CARE AND CLEANING

You can clean the TV as required, using a soft lint-free cloth. Be sure to occasionally dust the ventilation slots in the cabinet to help assure adequate ventilation.

The TV's screen may be cleaned with a soft, lint-free cloth as well. Take care not to scratch or mar the screen. If necessary, you may use a cloth dampened with warm water.

Never use strong cleaning agents, such as ammonia-based cleaners, or abrasive powder. These types of cleaners will damage the TV.

While cleaning do not spray liquid directly on the screen, or allow liquid to run down the screen and inside the TV. Also, avoid placing drinks or vases with water on top of the TV. This could increase the risk of fire or shock hazard or damage to the TV.

Caution: If fixed (non-moving) images are left on the screen for long periods, they may be permanently imprinted on the screen. Such images include network logos, phone numbers, and video games. Extended viewing of channels displaying these images should be avoided.

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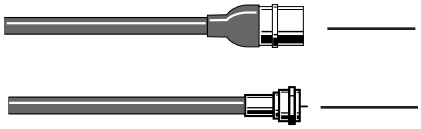
ACCESSORIES

General Cable Information

Antenna (or cable-TV) connections are made with either coaxial antenna cable or twin-lead cable. Coaxial cables are shielded so they are less susceptible to hum or interference from adjacent cables.



Round 75-ohm coaxial cable

Flat 300-ohm twin-lead cable

Most audio/video connections between components can be made with shielded audio and video cables that have RCA-type phono connectors.

Standard Audio/Video cable with RCA-type phono plugs (such as No. VH83)

Color-Coded Jacks

The jacks on the TV's monitor panel are color-coded for ease of use. The VIDEO jacks are yellow, the right AUDIO jacks are red, and the left AUDIO JACKS are white. When connecting components to each other, be sure that you always connect left outputs to left inputs and right outputs to right inputs. If a component has only one output (mono), connect it to the R/MONO INPUT jack.

To connect S-VHS (Super-VHS) components, an S-VHS video cable is required.

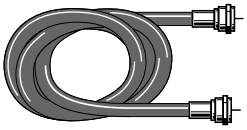
S-Video cable (such as No. VH913)

Gold-Plated Jacks and Gold-Tipped Cables

Gold plating helps prevent oxidation of contacts which provides much less loss than conventional contacts. A complete line of gold-tipped cables is available to help you obtain optimum performance from your equipment.

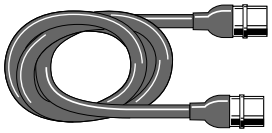
The following accessories are available from most dealers and electronics supply stores in case you want to position your components farther apart or need additional cables.

Antenna Cables



VH81 (3-ft)
VH82 (6-ft)

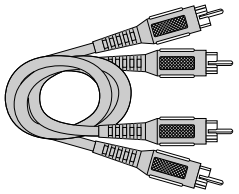
Screw-on Cable attaches to the round antenna connectors (called 75-ohm F-type) on the back of your VCR or TV. The ends screw onto the connectors for a secure connection.



VH89 (6-ft)

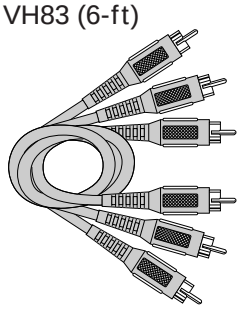
Push-on Cable attaches to the round antenna connectors (called 75-ohm F-type) on the back of your VCR or TV. Ends push on for a quick connection.

Audio/Video Cables



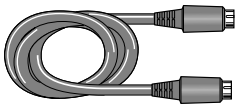
Gold-Tipped cable
VH83 (6-ft)

Monaural VCR Dubbing Cable Double cable that lets you connect the VIDEO and AUDIO JACKS of two VHS VCRs to duplicate tapes. Can also be used to connect a VCR to your TV. Cable is color-coded and shielded. Has RCA-type phono plugs on each end.



Gold-Tipped cable
AH84 (6-ft)

Stereo VCR Dubbing Cable Triple cable that lets you connect the VIDEO and AUDIO jacks of stereo components.



VH976 (6-ft)
VH913 (12-ft)

S-Video Cable has multi-pin connectors on each end for connecting S-Video components to your TV.

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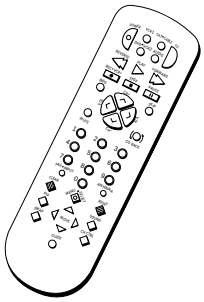
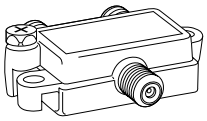
ACCESSORIES



CRK70M1
238544

Remote Control This is the remote control that came packed with your TV. Replacements or spares can be ordered as needed.



Splitter
VH47

2-way Signal Splitter helps you connect to a second TV or VCR.

ANT200

Amplified VHF/UHF/FM Antenna allows you to easily switch from the antenna signal to cable or satellite easily without disconnecting antenna.

Accessory Order Form

Description	Part No.	Price	Qty	
Screw-on antenna cable (3-ft)	VH81	$4.95		
Screw-on antenna cable (6-ft)	VH82	$6.95		
Push-on antenna cable (6-ft)	VH89	$5.95		
Monaural VCR Dubbing Cable (6-ft)	VH83	$5.95		
Stereo VCR Dubbing Cable (6-ft)	VH84	$9.95		
S-Video Cable (6-ft)	VH976	$7.95		
S-Video Cable (12-ft)	VH913	$8.95		
2-way Signal Splitter	VH47	$3.95		
Amplified Antenna	ANT200	$49.95		
Antenna Mixer	193984	$10.95		
Remote Control (CRK70M1)	238544	$33.50		
Audio•Video Adapter	228449	$4.35		

Prices are subject to change without notice.

Total Merchandise ..... $ _____

Sales Tax ..... $ _____

We are required by law to collect the appropriate sales tax for each individual state, country, and locality to which the merchandise is being sent.

Shipping and Handling ..... $ 5.00

Total Amount Enclosed ..... $ _____

Use VISA, MasterCard, or Discover Card preferably.

Money order or check must be in U.S. currency only.

No COD or CASH.

Detach Here

All accessories are subject to availability.
Where applicable, we will ship a superseding model.

Please complete other side also

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ACCESSORIES

Charge your order on your VISA, MasterCard, or Discover Card by filling in below

USE YOUR CREDIT CARD

IMPORTANT: Copy complete account number from your VISA card

My card expires: ☐☐ ☐☐

IMPORTANT: Copy complete account number from your MasterCard

Copy Number above your name on MasterCard ☐☐☐☐ My card expires: ☐☐ ☐☐

IMPORTANT: Copy complete account number from your Discover Card

My card expires: ☐☐ ☐☐

AUTHORIZED SIGNATURE
(Credit card order will not be processed without signature)
Prices are subject to change without notice.

Print or type your name and address clearly. This will be your mailing label.

A complete and correct order will save you days of waiting.

Name: _____

Street: _____

_____ Apt: _____

City: _____

State: _____ Zip: _____

Please make sure that both sides of this form have been filled out completely.

- Allow 4 weeks for delivery.
- All accessories are subject to availability.
- Prices are subject to change

United States and Canada Orders

To place your order by phone, have your Visa, MasterCard or Discover Card ready and call the toll-free number listed below between 8AM and 8PM (EST) Monday through Friday or between 9AM and 5PM (EST) Saturday.

Use this number only to place on order for accessory items listed on this order form.

1-800-338-0376

To place your order by mail, detach and mail the completed order form with credit card information, money order or check in US currency (made payable to Thomson Consumer Electronics, Inc.) to the following address:

Video Accessories
PO Box 8419
Ronks, PA 17573

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INDEX

A

Accessories 82
Amplifier 76
Antenna (ANT) 38
Audio menu 44
AUDIO OUTPUT 39
Audio Output Volume & Speakers 44
Audio Processor 44, 60
Auto Channel Search 17, 47
Auto Color 45
Auto Tuning 25, 26, 48

B

Back panel jacks 38
Basic Picture Controls 45
Batteries 5, 41
Black Level 45
Buttons
  Front panel 40
  Remote 36

C

Cables 82
Care and Cleaning 81
CC 41
CH CTRL button 58
Chan # 47
Chan Labels 47
Channel Block 50
Channel Directory 47
Channel Mapping 21, 54
Channel Marker 41
Channel menu 47
Channels
  DVD/VCR2 Channel 25, 48
  SAT/CABLE Channel 26, 48
  VCR1 Channel 48
Closed Caption
  Display 46, 61
  Mode 46, 62
Color 45
Color Warmth 45
Connections
  Basic 4
  Components 66
  Foldout 4
  Hints and tips 65
Contrast 45
Control Panels 11

F

Fixed images 81
Fixed output 39
Fixed Output, Speakers Off 44
Front panel buttons 40
Front Panel Lockout 50

I

INFO button 63
Inputs
  Audio, video 38
  INPUT 1,2 38

L

L/MONO 38
Labels 27, 47
Language 16, 46

M

Memory 47
Menu Language 16, 46
Menus 10
Mono 44, 60
MOVE buttons 58
Mute 44

N

Normal List 47

O

On-screen Program Details 63
One-Button Recording 57
Outputs 39

P

Parent Approved 50
Parental Controls
  Channel Block 50
  Front Panel Lockout 50
Parental Controls menu 50
Picture Control Presets 45
Picture Quality menu 45
Picture Tilt 46
PIP (Picture in Picture) 58
  PIP Chan 41
PIP button 58
Point and Select 8
Program details 63
Programming the remote to control components 30, 32, 33

R

Remote Control
  Programming 30
  Remote batteries are low 41
  using the 33
RIGHT 38

S

S-VIDEO 38
SAP 41
Schedule 49
Screen menu 46
Second Audio Program (SAP) 44, 60
Set
  DVD/VCR2 Channel 25, 48
  SAT/CABLE Channel 26, 48
  VCR1 Channel 48
Set Time 49
Setup 16
Setup menu 51, 52
Sharpness 45
Signal Type
  Cable TV 47
  UHF/VHF Antenna 47
Sleep 41
Sleep Timer 41, 49
SOUND button 60
Stereo 41, 44, 60
Subwoofer 39, 76
SWAP button 58

T

Tape Deck 76
Time
  Current 41
  Set Time 23
Time menu 49
Tint 45
Tone Controls 44
TV GUIDE Plus+ System 5, 14, 17–22, 51, 54–57, 79
  Channel Mapping 21, 54
  IR Controllers 5
  Next Menu 55
  One-Button Recording 57
  Scan Menu 55
  Sort Menu 56
  Surf Menu 54
  Troubleshooting 79
V
Variable output 39
Variable Output, Speakers Off 44
Variable Output, Speakers On 44
VIDEO 38
Video Noise Reduction 45

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CREATING A GREENER FUTURE

At Thomson Consumer Electronics we are dedicated to the preservation of our natural heritage and to a healthy and safe way of life for current and future generations. This is a global effort which encompasses every THOMSON facility throughout the world.

We believe that clean air, clean water, a protected earth, and healthy people are not only practical and desirable goals, but achievable ones as well. Our Corporate Environmental, Health and Safety Charter acknowledges our commitment to protect these precious assets and provides a challenging vision and guideline for conducting our business.

THOMSON CONSUMER ELECTRONICS

Below are a few examples of Thomson's achievements in our efforts to preserve our natural resources.

THE EARTH

Thomson reclaims millions of pounds of hazardous waste annually, diverting it from landfills.

Thomson treats millions of pounds of waste water sludge annually and renders it non-hazardous.

Thomson recycles over 50 million pounds of non-hazardous material annually that otherwise would have been treated as trash, an overall recovery rate of 50%.

Thomson globally recycles millions of pounds of broken television picture tube glass annually through both internal and external reclaim processes.

THE AIR

Thomson has replaced solvent-based paints at many locations resulting in an 80% reduction in toxic air emissions for equivelant material used.

Thomson has eliminated the use of ozone-depleting substances at television manufacturing facilities around the world.

Thomson collects and returns over 1.5 million pounds of glass and furnace dust to the glass making process annually.

Thomson has launched worldwide energy savings programs which contribute to efforts to reduce air emissions from electrical generating facilities.

THE WATER

Thomson recovers over 2 million pounds of fine glass particles from process water each year and recycles them back into its glass furnaces.

Thomson's state-of-the-art waste water treatment plants filter out over 26 million pounds of solids from process water each year.

Thomson's U.S. glass factory recycles 2,500 gallons of water per minute and cleans 2.6 million gallons of water per day.

Thomson is researching new processes and is developing new manufacturing equipment and technologies to further reduce large volume water use.

Thomson has also increased its usage of recycled materials for packaging of our products. For example, in the U.S. and Mexico our television plants use recycled content in our television cartons and instruction booklets. The inks used for the print on cartons and instruction booklets are soy based. For a free brochure regarding Thomson's Environmental Health and Safety Programs, write to Thomson Consumer Electronics' address below, attention Environmental Programs: INH340.

Please do not send any products to the Indianapolis address listed in this manual or on the carton. This will only add delays in service for your product.

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